MOTOR AGE

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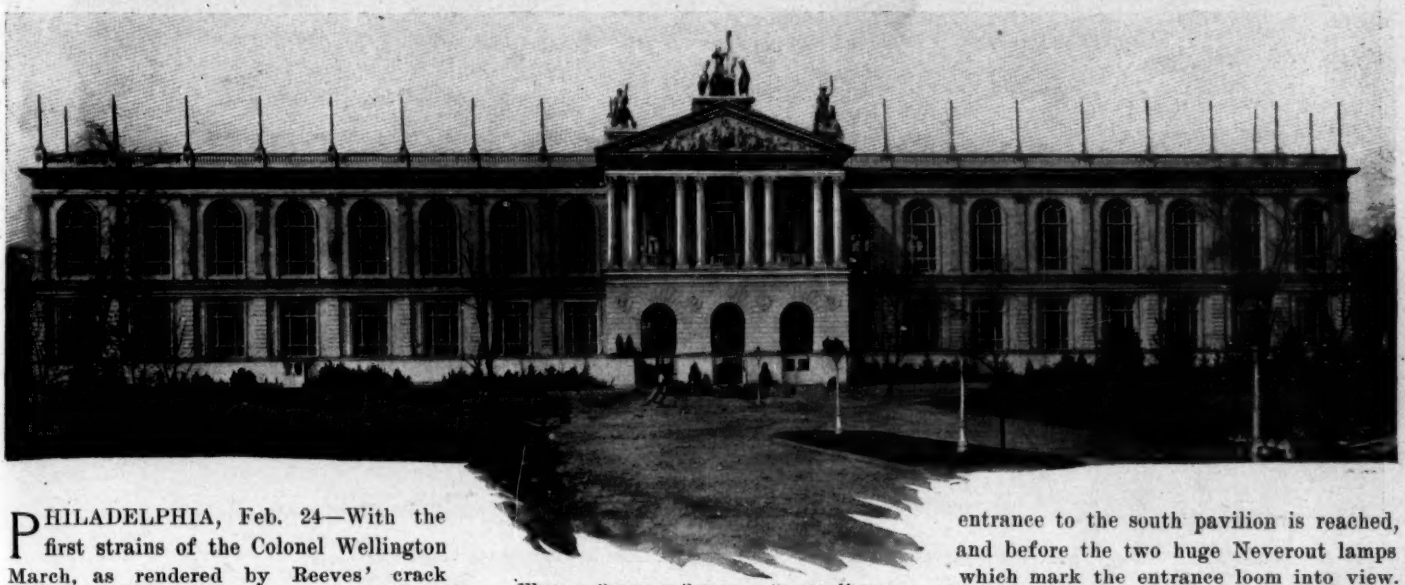
QUAKER SHOW HAS CRUSH OF PEOPLE



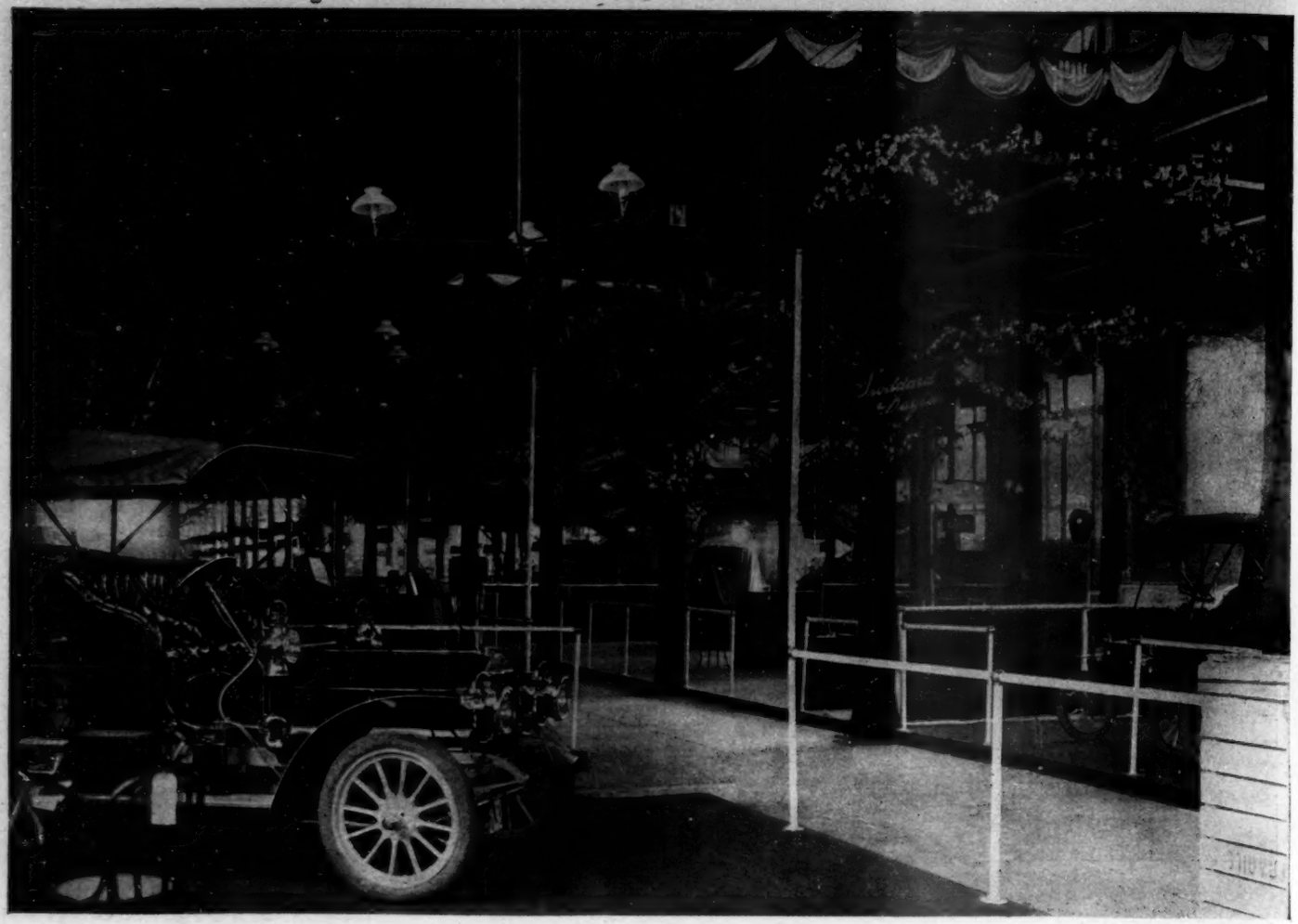
WHERE QUAKER SHOW IS BEING HELD

PHILADELPHIA, Feb. 24—With the first strains of the Colonel Wellington March, as rendered by Reeves' crack American band, imported from Providence for the week by Manager Chester I. Campbell, the fifth annual automobile show, under the auspices of the Philadelphia Automobile Trade Association, in the national export exposition building, in West Philadelphia, was successfully launched tonight. An hour later 20,000 of the Quaker city's elect were cruising up and down the long aisles inspecting the exhibits and, with more or less relevant questions, further tiring the almost exhausted attendants, who, after 2 days of hard installation work, had hardly had time to return to the city for a wash-up in preparation for the opening function.

To say the opening night was a success from the point of attendance would be stating it mildly. Such an outpouring amazed even the always sanguine Campbell, and to say his rather conservative assistants were dumbfounded at the size of the turnout is only the truth. But there were numerous holes in the exhibits, and a few of the displays consisted of nothing more than a large, green-carpeted, square space, divided off by handsome brass-trimmed white railings from its neighbors, and decorated with a modest sign bearing the legend: "Exhibit delayed." The truth of the matter is that several of the exhibition machines that have been doing the show circuit were at Cleveland, and as that exhibition did not close till 3 hours after this opened it is safe betting that those cars will not reach the places reserved for them here until midday tomorrow. Local agents who handled several makes of cars, of course, so arranged their exhibits that the absence of the circuiters was not noticed. It was the smaller fellows, with but one agency, and no show car in town, that had to post the delayed signs. Some of the show cars thus delayed are portions of the Ford, Thomas, Columbia, Maxwell, St. Louis, Napier, Cleveland and Marmon exhibits.

There is some doubt expressed here as to whether the attendance will continue on the basis indicated by tonight's showing. On alighting from the cars at Thirty-fourth and Walnut streets, there is a walk of five long blocks before the entrance to the south pavilion is reached, and before the two huge Neverout lamps which mark the entrance loom into view. The show-goer grumbles, and "How much further?" are heard on every side. This will tend to keep down the crowds, but the management will partially overcome this defect of location by establishing a temporary but gigantic free automobile line, consisting of all the demonstration cars that can be secured. And it is just barely possible that this great handicap may prove to be a blessing in disguise.

Once within the doors of the big building, however, all memories of the difficulties in reaching the show are forgotten. The lower hall's length of 400 feet is traversed by two parallel asphalted aisles, on either side of which the stands, carpeted with material of a quiet shade of green, are placed. Dividing the sections from the aisles and from each other are brass-trimmed white enameled rails, from which hang 4-foot curtains of the same quiet green shade. The color scheme is further continued on the many pillars, the nakedness of which is hidden by artistic draping of green and red, the bare walls and the roof being hidden by thousands of yards of bunting and flags of all nations. Over each aisle and over the center exhibits are threescore of arches entwined with pink and white



MAIN FLOOR OF PHILADELPHIA NATIONAL EXPORT BUILDING, LOOKING EAST

blossoms, in which nestle myriads of tiny electric bulbs—the whole producing a fairy-like effect which drew gasps of astonishment and delight from the visitors—those of the feminine persuasion particularly. Instead of the glaring and indiscriminate system—or lack of system—which characterized former shows here as regards signs, the tendency is to the other extreme—indeed, so small and neat are they that they require looking for. These signs, in old English tavern style, are in gilt script on a background of Flemish oak, and depend from iron scrollwork brackets well out over the aisles and at a uniform height from the floor. The upper hall decorations are not so elaborate; the color scheme, however, is the same and the signs are wine color with gilt lettering. The extent of the show was something of a surprise to those who have been reading that the original 40,000 square feet of space was taken 2 months ago. It was, but the wily Manager Campbell prevailed upon the owners of the building to move into one corner and cover from sight a bunch of Philadelphia museum exhibits on the second floor, and here he removed the entire accessories display after it had outgrown the ridiculously small space originally assigned to it in the Mezzanine gallery, which was converted into a mammoth restaurant capable of accommodating 150 hungry show attendants at one time.

When the sundries had been taken care of, the commercial vehicle problem loomed up. All the heated portion of the huge building had been pre-empted, but Yankee Campbell was equal to the emergency. He caused to be railed off and hung with the usual red-and-green draperies 10,000 additional square feet of space in the cold main hall, and here the huge leviathans of trade will repose during the week, the gentlemen to whom are assigned the conversazione end of the game performing their duties in overcoats. Thus the space devoted to exhibition purposes is: 40,000 square feet in the lower hall, 15,000 square feet in upper hall, and 10,000 square feet in the main building—65,000 square feet in all.

All the well-known trade publications have spaces at which subscriptions are taken and sample copies distributed gratuitously, and—just think of it!—all the dailies have gone down into their jeans and produced for similar spaces, where their merits as advertising media are set forth. Some of them have spent large sums in decorations. A temporary telephone installation, with a central in the building, renders communication between the various stands and with the city easy. In this connection Manager Campbell had quite a war on his hands. The Bell and Keystone companies had a mix-up as to which should install the service. The war was averted by a compromise, which allowed both companies to get into the building, but the Bell has by far the larger number of 'phones in use.

To provide additional entertainment to the crowds a portion of the big second floor has been inclosed and fitted up for motion-picture displays. Accommodations have been provided for 500 persons and the shows will be free to all. To expedite easy admission to the show each exhibitor and assistant is provided with a large white button, on which in blue letters is a number and the announcement that the wearer is favored of the gods. Pressmen have the usual tickets.

LOOKING WEST FROM RESTAURANT ON MEZZANINE FLOOR OF QUAKER EXHIBITION

One feature in connection with the show which did not pan out exactly as planned was the scheme of the Philadelphia Record to present a Rambler car to the person lucky enough to estimate nearest the exact number of guess coupons which should be turned in. There was a proviso that in the event of a tie the choice should be decided by lot. Right here the scheme came in conflict with the postal authorities, who gave orders to cut it out. The Record, however, is determined to give the Rambler away, and has announced that the person sending in the largest number of words, made up of the letters contained in the name of the paper, will get the car.

Star cards are not lacking. At the Locomobile stand Joe Tracy's No. 7, which finished ahead of a dozen foreign cars in the Vanderbilt race on Long Island last fall, is constantly surrounded by a group of the curious, and the attendants are compelled to tell the story time and again. Then there is the Baby Reo, which, of course, draws the women and children. Attempts to buy the little beauty or one like it are stalled off with the stereotyped: "Entire output sold ahead for the year." The Stanley mile world's record steamer is expected here by tomorrow night, although the local agent has announced an individual show at his own salesroom. At the Rambler stand is installed the mud-covered Type 1 car which was started on Tuesday at noon on a 1,000-mile non-stop test. When its task was finished on Thursday it was running so smoothly that Local Manager Smith decided to send it on a tour of the up-state agencies between Philadelphia and Harrisburg, going via Reading and returning by way of Lancaster. The trip was concluded Saturday afternoon with a trifle of over 1,400 miles to its credit, and the engine was stopped after 102 hours' continuous work only because the officials would not allow the car in the building with the motor running, that being against the rules, being forbidden by the fire insurance companies which insure the building.

The show was hardly an hour old when the Foss-Hughes Motor Car Co. drew first blood by selling a Cadillac touring car with extension top, followed a half hour later by the Rainier company—a newcomer to Philadelphia, by the way, being just about to establish a local branch—selling two of its 35-horsepower limousines. In this connection the exhibitors declare the difficulty in reaching the show will not act as a deterrent to the real buyer, and will thus tend to separate the non-buyer chaff from the buyer wheat as the week progresses. It certainly does look as if this is to be a good business show for everyone.

All the cars having branches or agencies in this city are represented at the show except the Fiat, National, Peerless, Stevens-Duryea, Stanley, Franklin, Oldsmobile and the Pope line, and the concerns handling these machines—the Quaker City Automobile Co., the Eastern Automobile Co., Tioga Auto Co. and H. Allen Dalley—are having individual shows at their own salesrooms.

Some of the exhibits are very large, that of the Foss-Hughes Co.—Pierce, Cadillac and Baker electrics—having about a dozen cars on the floor. The Pennsylvania Electric Vehicle Co.'s exhibit is one of the largest and at the same time one of the handsomest in the

EXHIBITORS AT PHILADELPHIA

AUTOMOBILES

Foss-Hughes Motor Car Co.
Keystone Motor Car Co.
Motor Shop.
T. B. Jeffery & Co.
Iroquois Iron Works.
Rainier Co.
Knox Automobile Co.
Titman, Leeds & Co.
Reo Motor Car Co.
Hamilton Automobile Co.
Smith & Mabley.
White Garage.
Locomobile Co. of America.
Winton Motor Carriage Co.
Gawthorp & Wister.
Blakeslee Electric Auto Co.
Lebanon Motor Works.
Kelsey Motor Car Co.
H. M. Ambler.
Fairmount Engineering Works.
Mercedes Import Co.
Mors Automobile Co.
St. Louis Motor Car Co.
Napier Motor Car Co. of America.
Diamond Motor Car Co.
Brazier Auto Works.
Pennsylvania Electric Vehicle Co.
Martin & Hart.
Daimler Automobile Co.
Ford Motor Co.
F. F. Young.
J. Henry Mitchell Mfg. Co.
James T. Halsey.
Reading Standard Cycle Mfg. Co.

show—the entire Columbia gasoline and electric and the Buick lines being shown. The Rambler exhibit is almost as large, while the Studebaker outfit is the most comprehensive single exhibit under the exposition roof. The majority of the exhibits, whether of cars or accessories, are displayed to better advantage than was possible at New York, the larger spaces giving ample opportunity for moving around between the cars and closely inspecting the various features. The Smith & Mabley and the Mercedes Import Co.'s exhibits—the only foreign cars in the show, aside from the Napier—are almost adjoining. Both are showing the Mercedes. Manager Campbell is decidedly optimistic regarding the show. He has labored long and hard to make it the artistic success it has proven itself to be, and despite the inaccessibility of the building in West Philadelphia, he confidently believes the figures at the end of the week will show a bigger attendance than any other exhibition on the minor circuit. Certain it is, the first night has certainly been a corker and delighted everyone.

ACCESSORIES

Paul P. Rippen.
W. W. Taxis.
O. F. Zurn Co.
Keystone Lubricating Co.
D. B. Latner.
Puritan Soap Co.
George W. Nock Co.
J. L. Gibney & Bro.
N. A. Petry.
Way Muffler Co.
Penn Automobile Supply Co.
Rose Mfg. Co.
Pennsylvania Rubber Co.
Penn Petroleum Co.
William C. Robinson & Son Co.
H. M. & S. Armored Tire Co.
United States Motor Tire Co.
Voorhees Rubber Mfg. Co.
Hutchinson Electric Horn Co.
J. W. Jones.
E. Teel & Co.
Philadelphia Auto School Co.
American Shock Absorber Co.
James Boyd & Brother.
Hartford Suspension Co.
Gilbert & Barker Mfg. Co.
Charles Freihofer.
MacDonald & Campbell.
Keasbey & Mattison Co.
Charles E. Miller.
Consolidated Rubber Tire Co.
Michelin Tire Agency.
J. H. Jolley & Co.
H. A. Conners.

CLEVELAND BOASTS BIG LOCAL SHOW

Paid Attendance Reached 66,000—Trade Prospects Very Bright for the Season Just at Hand

Cleveland, Feb. 26—Cleveland's show, which closed late Saturday night, was undoubtedly the most successful affair ever held in this country outside of New York and Chicago. The attendance was double what it was last year. The average daily attendance was 11,000 or 66,000 for the week, not including exhibitors and demonstrator's tickets. From the standpoint of sales it was also far better than any previous Cleveland show. The indications for after sales are most pleasing. About 3 days of the week the weather was warm and balmy, ideal for demonstrations, and the exhibitors took excellent advantage of the opportunity. There were probably more demonstration cars in service than there were machines inside the armory. At almost any time of day or evening there were fifty or more on the three streets surrounding the building, ready for inspection or instant use.

Visitors who rode in demonstration cars and many out of town people who were driving cars have good reason for a sincere dislike for the methods of the Cleveland police. Chief Kohler put the lid on the automobile game in a manner that was most disconcerting. Not only did he enforce to a letter the speed ordinance calling for 8 miles an hour in the down town district and the ordinance requiring strangers as well as city people to wear tags, but he threw out a drag net for those who violated a recently instituted traffic ordinance providing that all vehicles shall keep to the right and shall not cut across corners in going from one street to another. Comparatively few city people, let alone the strangers, had ever heard of such an ordinance or knew that it was being enforced until they were up against it. As a result automobilists were gathered in droves and the dockets were crowded with the cases. The police court thought it a good opportunity to make a good showing for this department and fines were assessed without regard to feelings or previous records. Several instances were particularly flagrant and resulted in Mayor Tom L. Johnson calling down the chief of police.

One case especially stirred up the indignation of everyone. Mrs. George W. Crile, wife of a prominent physician, was gathered in for failing to turn a corner properly. The policeman ordered her to accompany him to the station. She refused and he called a patrol wagon. Finally she went along, leaving a friend in charge of her automobile. At the station Mrs. Crile was docketed like a criminal and was kept waiting in a barred room for some time before she could get a hearing. She explained that she was inexperienced in the use of the machine, that she had never heard of the ordinance in question, and that she had been out of the city when it was passed. Mayor Johnson heard of the matter and called Chief Kohler and the patrolman who made the arrest before him, and as a result of their conference City Solicitor Baker ordered the case against Mrs. Crile dropped. Prominent automobilists have filed a protest against such treatment of a woman. They claim that it is an outrage to arrest a woman for such a petty offense and compel her to go to the station. They say the policeman should either have warned her or taken her number and name and notified her husband of the infraction of the ordinance so that he could accompany her to the station.

THE FIRST STEARNS EVER MADE

Another case may result in suit for damages against the city. Henry Chisholm, of the Chisholm & Phillips Automobilium, and a former state representative, who, by the way, was the father of the automobile measure making the legal speed 15 miles an hour in residence districts, fell victim to the corner-cutting rule. He demanded an immediate trial and put up the defense that he had been forced to cut the corner in order to avoid collision with a street car which was approaching. The court, however, assessed him $10 and costs. Chisholm will appeal the case, as he believes a higher court would appreciate his position.

R. H. Magoon, a well-known dealer, contributed most painfully to the city for the privilege of demonstrating to prospective buyers that his machines were fast. Twice

for himself and twice for one of his demonstrators was his record.

The situation got so bad for demonstrators that the show management issued a notice to all exhibitors calling attention to the various ordinances and restrictions.

Mayor Tom L. Johnson showed his interest in the game by visiting the show nearly every day and finally winding up by placing an order for a Winton limousine of a dark blue shade. This is the third Winton Mr. Johnson has owned. With the delivery of this machine he will turn over to the Winton company his old original, and it is probable it will go into the Winton hall of fame, along with Mr. Winton's first models and the three Bullets. The machine in question was the first tonneau car ever built by the Winton company. It was built to Mr. Johnson's order in the fall of 1901, and the year following it was made the standard model of that company. The machine was the first red car seen in Cleveland, and it immediately received the appellation "Red Devil." Mr. Johnson used it throughout his campaign for governor in 1901 and covered nearly every county in the state, doing several thousand miles. The following year he used it in the local campaign and had it fitted with a high back, chariot-like tonneau, and from this elevation he made many of his addresses on the fly. In 1903 he used it in another race for the governorship, and again in 1905 it won him the mayoralty. Last fall he had the car practically rebuilt and fitted with a limousine body and has used it steadily throughout the winter. It has always been his favorite machine despite the fact that he owned a later Winton model and a big French car, for which he is said to have paid $13,000. The old Red Devil has probably seen more hard work than any machine in Cleveland, and in spite of this the mechanism is still in excellent condition, and the mayor's only reason for supplanting it was that he wanted the latest out.

MAYOR JOHNSON'S OLD 1901 WINTON

At the rooms of the Cleveland Automobile Club in the Hollenden on Thursday the organization of the Ohio Automobile Association was arranged for. There were representatives present from Akron, Canton, Cincinnati, Columbus, Dayton, Lima and other towns. Fred T. Shole, president of the Cleveland Automobile Club, called the meeting to order and served as temporary chairman. R. H. Cox, of Cincinnati, was made temporary secretary. A committee designated to draw up a constitution and by-laws was appointed as follows: R. H. Cox, Cincinnati; Vernon Burke, Cleveland; Andrew Auble, Akron; W. T. White, Cleveland, and A. G. Batchelder, New York. In the afternoon the committee appointed at the morning session considered the subject of constitution and by-laws and it is understood agreed upon a form similar to that adopted in New York. The primary object of the state association will be to further the good roads movement and the association will take steps to support several measures now before congress and before the state legislature now in session. Final action will be taken on the organization committee's report at a meeting to be held in this city about March 15. At that date it is probable that a permanent organization will be effected. At noon the visitors were entertained at a luncheon at the club.

The automobile class of the Y. M. C. A. derived much value from the show. Accompanied by the two instructors, J. L. Bushnell and A. B. Weill, the fifty-one members of the class attended nearly every evening and had the workings of every machine thoroughly explained to them. Through the courtesy of several of the exhibiting concerns they were also given outdoor demonstrations.

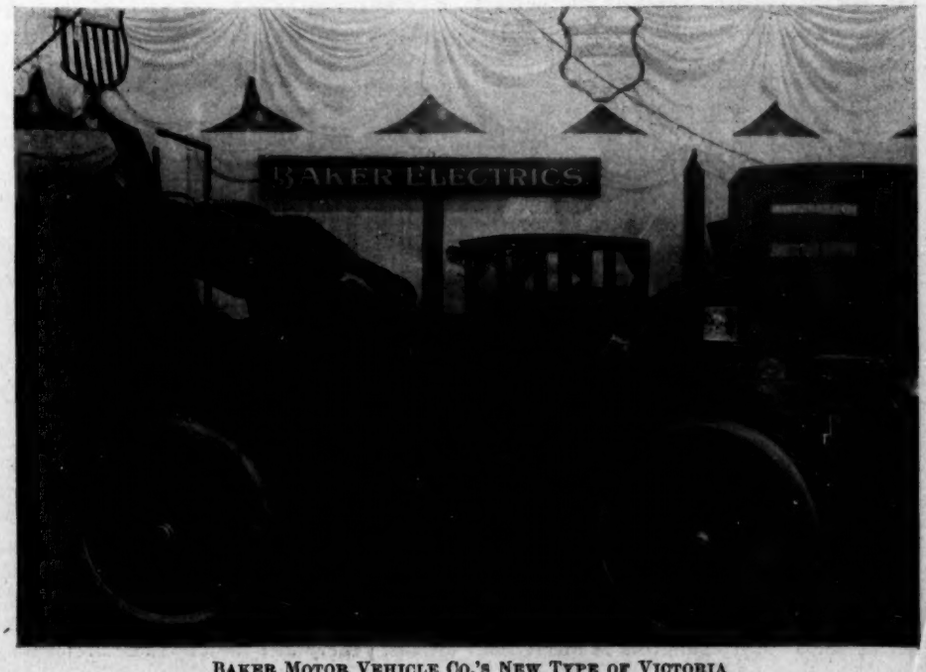
The Baker Motor Vehicle Co. had the largest exhibit of electric vehicles that was ever exhibited at any show, it is claimed. In all there were eight models. The most conspicuous was a magnificent victoria, the first of this type ever built by the company, and just completed for the show. It is of the rear drive type, has two sets of batteries, giving it a radius of about 50 miles and it is beautifully upholstered and finished.

During the show the Baker company gave a demonstration of its newest 1906 electric, the Suburban, on the Cleveland streets. A run of 84.2 miles was made with the regular equipment of battery and tires. A speed of 14.63 miles per hour was maintained throughout the run. The Suburban is a new carriage for 1906 and is of the male phaeton type with a long wheel base and a maximum speed of 22 miles per hour over hard, smooth roads and a mileage claim of 40 to 50 miles on a single charge of the battery. The car, in the test, came up to all the claims made for it by the company.

GOTHAM GARAGE SITUATION

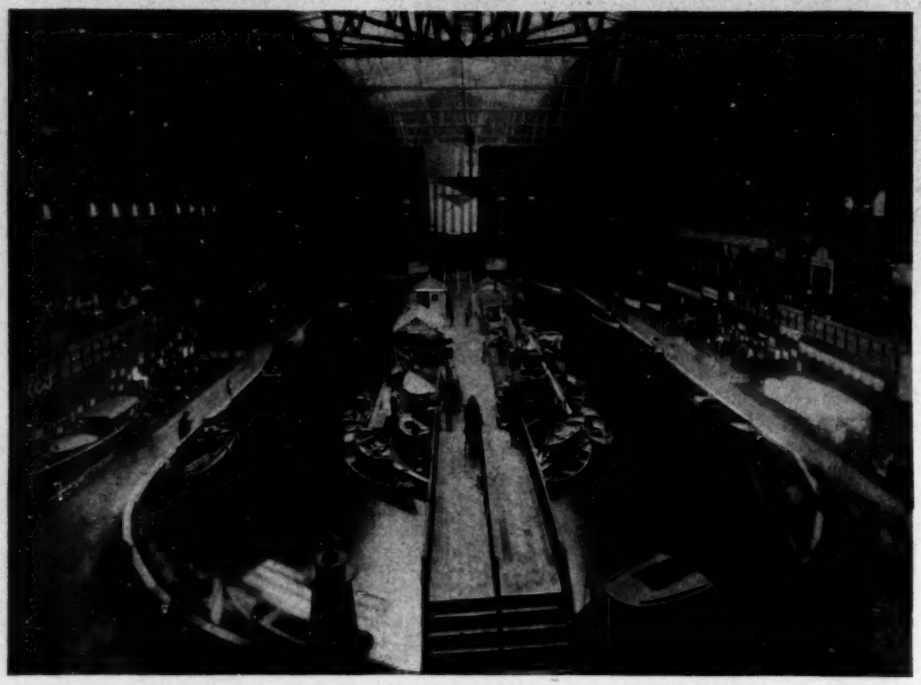
New York, Feb. 27—The representatives of the New York fire department who have in charge the care and licensing of the various garages where gasoline is stored and sold, say that the fire situation in the cases of about fifty garages which have been interdicted is a grave menace to automobile owners who are storing there, not to speak of the residents in the neighborhood of those buildings. George E. Murray, the head of the bureau of combustibles, and his assistant, E. F. Horne, have been saying things about the violations of law and the withdrawal of insurance by the board of fire underwriters.

The things demanded in a garage within the law and which are lacking in many of them include a clean cement floor, with sand buckets handy. Gasoline, when not in a permanent delivery station, must be carried in approved non-explosive cans. All drop lights must have metal cages and must have keyless sockets from connections on the wall four feet from the floor.



BAKER MOTOR VEHICLE CO.'S NEW TYPE OF VICTORIA

MOTOR BOAT SHOW IN NEW YORK CITY



GENERAL VIEW OF THE MOTOR BOAT SHOW IN MADISON SQUARE GARDEN

NEW YORK, Feb. 27—The annual national motor boat and sportsman's show now on at the Madison Square Garden, is held jointly by the National Association of Engine and Boat Manufacturers and the Sportsman's Exhibition Co. It is a hybrid exhibition, the features including wild animals in cages, camping outfits, sporting goods in general, guns, canoes, water sports, life-saving exhibitions, rifle ranges, Indian village and moving pictures, in addition to the boats, motors and power boat accessories. It is said that it is possible for the power boat men to fill the garden with a show of their own, but the sportsmen had the call on the free dates at the garden and so, for the second year, the boats have to show with miscellaneous outdoor sports. The result is a show very interesting to the non-technical visitor, but hardly convincing to those intimately interested in power boats. The show is thronged day and night and is a success from a popular standpoint. It will close the night of March 8.

This year the large tank of water in the center of the arena space has been enlarged and deepened to give a chance for heavier boats with greater draught to be shown in the water and in operation. About fifty of these are from time to time set afloat, and demonstrations are given continually to curious visitors. As a result sales have been very heavy. Nearly all the boat exhibits are plastered with placards showing where numerous orders have been placed since the show opened. The basement is used by the motor people to show engines in operation. The number of actual boat exhibitors is about the same as last year. The total of engine manufacturers exhibiting is much greater. On the main floor there is an exceedingly good showing made by some of the larger companies. The Standard Motor Construction Co., of Jersey City, shows many marine motors of high horsepower. The Gas Engine and Power Co. and Charles L. Seabury, of Morris Heights, N. Y., show a large line of boats and motors. The Lamb Boat and Engine Co., of Clinton, Iowa, and the Lozier Motor Co., of New York, also make noteworthy displays. These are the most important of the exhibits, though a number of very well-built and novel motors are shown by other exhibitors.

The boats in the garden this year show that the fad for speed which has been so popular for 2 years, has gone, and it is doubtful if there will be more than two or three boats built this year that are simply for racing. In place of the racing craft is the substantially built, comfortable boat in which a man can take his family or his friends, have a pleasant afternoon on the water and not fear that the delicate motor will break down, or that those on board will be half drowned before the boat returns.

There are three types of boats shown in the garden—those that have speed but not excessive speed, and are for use on the water as the automobile is on the land; the cruising boat, and the launch just for use on smooth water or as a yacht tender. In the garden are boats that illustrate all these types, from the small skiff, fitted with a 1-horsepower motor, to a big cruising craft, fitted with berths, gallery and cabin. There are boats clinker-built, with the planking overlapping; carvel-built, with perfectly smooth sides; and the boats built of metal, which are very popular with those who want a small craft for use on small lakes.

A good deal of interest is taken in the exhibit, by the Siegel-Cooper Co. of the Pierce boats. Three types of boats are handled by this concern. The smallest is called a runabout launch.

One of the most attractive boats on the lagoon is the Elco. It is an electric launch like those that are so popular on the lakes in the Adirondacks. This boat has four cane seats, and a seat that extends across, so that it can carry seven persons. This boat is fitted with a small gasoline motor which can be used to charge the electric batteries in case the boat gets where no electricity can be obtained. The motor will easily charge the batteries in this way in 3 hours.

Another craft which comes in for a good deal of careful inspection by visitors is the Beat Me. This boat is 35 feet long. The sheer strake is oak and the planking land deck trimmings are all of polished mahogany. It is fitted with a 60-horsepower motor placed well forward which drives it at the rate of 22 miles an hour. On deck it is a double-ender. Forward there is a turtle deck and aft the boat at the water line widens out to keep it from squatting when running. Just aft of the engine space is a seat for the helmsman with room at his side for the mechanician. Aft of this seat is a glass screen which can be lowered if desired. Then comes the cockpit, in which are four automobile seats fixed with lockers underneath, and in the after part a seat extending across the boat so that seven can be carried in this craft. Commodore Cornelius Vanderbilt has ordered one for use on the steam yacht North Star. It will be a little lighter than the boat at the show, as it has to be hoisted on the davits of the yacht. J. C. King has another of these, and he used it at the recent motor boat carnival at Lake Worth. A boat like the Beat Me costs $5,000.

Gasoline motors for use in boats are shown in the basement. A study of the marine motors shows a general improvement in every feature, with a very few departures. Several motors shown are self-starting, the power to accomplish this being secured by the use of compressed air. The four-cylinder motor is the predominating type, although motors of one, two and three cylinders are used in the small boats and of six cylinders in the large high speed boats. A majority of the single-cylinder motors are of the two-cycle type, while the four-cycle principle prevails in the multiple-cylinder motors. The open crankcase is becoming more general in the high speed motors. The make-

and-break ignition with low tension magneto and the jump spark ignition using the storage battery are both used to a great extent, with the former perhaps more generally employed in high speed motors.

Among the exhibitors are a number of firms which were seen at the automobile shows. Among them are the William Cramp & Sons Ship & Engine Building Co., the Semi-dry Battery Co., the Lunkenheimer Co., Dayton Electrical Mfg. Co., Charles E. Miller, William Roche Dry Battery Co., C. F. Splitdorf, the Gabriel Horn Mfg. Co., and the Witherbee Ignition Co. The displays in these cases are practically the same as those at the automobile show.

At a meeting held at the garden the American Power Boat Association named the following for officers and members of the executive committee and the names will be acted upon at the annual meeting to be held on March 7: J. Norris Olipant, president, Thousand Island Yacht Club; Anson B. Cole, secretary, Manhassett Yacht Club; J. H. Wainwright, treasurer, American Yacht Club; H. J. Gielow, measurer, Atlantic Yacht Club; executive committee, John H. McIntosh, Columbia Yacht Club; J. G. Knapp, Chippewa Yacht Club; Harold Brown, Swampscott Yacht Club, Boston, Mass.; H. J. Mitchell, Riverton Yacht Club, Riverton, N. Y.

LANCIA SAILS FOR FRANCE

New York, Feb. 26—Lancia sailed for Italy on Saturday after a week's sojourn in New York, during which time he had conference with Mr. Hollander of the Hol-Tan Co., and with officials of the racing board. Lancia came to New York with Cedrino, the Fiat machines of both drivers being shipped to this city at the same time. The Italian driver took his car with him on the St. Paul; Battesta, his mechanic, who was thrown from the machine and injured about the head during the Cuban road race, acccompanied Lancia. The mechanic has not fully recovered. He is able to stand and walk a little but is still under medical care and very weak. Lancia was with Mr. Hollander when seen at the pier on Saturday. Both confirmed the report that the Italian would return to this country for the Vanderbilt race in October. Lancia is optimistic, notwithstanding his hard luck on this side of the Atlantic. His characteristic smile was in evidence as he talked of his hopes for success in the coming fall race.

"I am very glad I shall have another try at the Vanderbilt race," said Lancia in his broken English. "My new racing car will embody some minor but very valuable improvements, and I hope to get through the next race without accidents. Did I like the racing at Ormond? Oh, yes; the beach offers excellent facilities for high speed, but the weather conditions were not of the best during the races. I did as well as I could with my car."

ALCOHOL AS A FUEL

Prof. E. Thomson Sends Paper on Denaturized Product to Ways and Means Committee

Washington, D. C., Feb. 24—In connection with the hearings before the ways and means committee of the national house of representatives on the various bills relating to the removal of the internal revenue tax on denaturized alcohol, an interesting statement from Professor Elihu Thomson, noted throughout the electrical, mechanical and scientific world, was read.

The following excerpts from the paper will be found interesting: The importance of cheap alcohol as a fuel for internal combustion engines is not so generally realized as it should be. The increasing use of this type of engine, operated generally by gasoline as a fuel, is evident to everyone. The general application of the explosion type or internal combustion engine to automobiles is already an evidence of its great convenience and effectiveness. The use of gasoline as the fuel for such an engine is, however, subject to some disadvantages as compared with the employment of alcohol. In the first place the possible supply of gasoline is limited, and its increasing use must inevitably result in a very undesirable increase of price. It is a sort of by-product of the oil industry, and its price has already increased and will probably continue to increase. This is true of the better or higher qualities.

The fact has been developed that alcohol is suitable as a motor fuel even when it contains as high a percentage as 15 per cent of water. Notwithstanding the fact that the heating value of alcohol, or the number of units contained, is much less than that in gasoline, it will be found by actual experiment that a gallon of alcohol will develop substantially the same power in an internal-combustion engine as a gallon of gasoline. This is owing to the superior efficiency of operation when alcohol is used. Less of the heat is thrown away in waste gases and in the water jacket. There is just now the beginning of a large development in the application of the internal-combustion engine to the propulsion of railway cars on short lines as feeders to the main line. In this case an ordinary passenger car is equipped with a power compartment at one end, in which power compartment there will be installed an engine of, say, 200 horsepower, of the internal-combustion or explosion type. The growth of such a system is liable to be hampered in the near future by the cost of gasoline as a fuel, and the difficulties of using kerosene are still quite considerable. In this case alcohol, which could be produced in unlimited amount, could be substituted. In many countries abroad, particularly Germany and England, where the price of gasoline is already becoming prohibitive, denaturized alcohol has come into quite general use. In Germany favorable legislation was secured some time ago, whereas in England its achievement is only a matter of a few months. In these countries alcohol is made largely from potatoes, beets and other vegetables, and the boom given to the cultivation of these products is most pronounced in many sections. The cost of manufacture from these products is very low and the quality of alcohol produced has been proven to be an excellent fuel for hydrocarbon engines.

STILL TALKING ALCOHOL

Paris, Feb. 16—Periodically there arise here protests and short compaigns against the use of gasoline for fuel in motor cars. The best fuel, say partisans, is alcohol derived from the beetroot. The production of this is a national industry in France and government and industrials alike in Germany and France do all they can to foster the trade. The price of the spirit during 1900 and 1901 was about 35 cents a gallon, but this price is much increased now by reason of the failure of the beet crop in 1904 and 1905. If a regular and cheap supply of the spirit is assured it will become a serious competitor to gasoline, which is heavily taxed on entry into French territory. It is inferior, however, to the extent of 25 to 30 per cent in the essential properties as a fuel and this, of course, is a drawback for automobile use. There is now some discussion going on on the above lines. It has recently been discovered that the government stores of gasoline, which were made at several points along the coast for use in case of need in government motor boats, has undergone a decrease to the extent of 20 per cent in a year. Notwithstanding the fact that the liquid was stored in what are believed to be airtight tanks holding a few gallons, the spirit has imperceptibly diminished, and the fact is brought up by the opposers of this fuel as one more reason for official adoption of alcohol for government boats and for automobiles.

COUNT GOES HOME

New York, Feb. 26—Count Henri de La Valette, the representative of the Automobile Club of France who has been studying the industry in this country in a number of American cities, returned to New York on Friday last and sailed Saturday for Europe. He returned to France to assist in arranging the details of the grand prix event, being a member of the committee in charge of this contest. Count de La Valette will return this summer to give 2 months more to the study of the same details which have engrossed his attention on this trip. The count talked freely of his visit and his findings and declared he had no idea Americans were buying motor cars so freely.

MOTOR AGE

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WHAT A STRONG MAN MIGHT DO

CHICAGO is great in many things; it is great in motoring—its boulevards extend for a hundred miles, there are miles upon miles of good highways leading out of the city in all directions, it boasts the finest automobile stores and an immense amount of local business, to say nothing of selling to practically the entire west. It is in a sense the motoring center of the country.

It has its faults just the same as other great municipalities have; it has its stock yards and the accompanying disagreeable odor; it has its wind storms that give it its nickname the Windy city; and it has its beautiful lake to give its citizens an ideal summer existence. But it has, too, the greatest number of grafting officials of any city on earth; it has the most rank motorphobists; it has the most drastic automobile regulations and the most observing and critical police as far as automobiling goes. While automobilists are compelled to walk the chalk mark of regulations the criminal pages of the city's criminal record are being filled so rapidly that new book after new book is being brought into service. The Chicago papers are filled daily with accounts of the most fiendish crimes, with stories of unlimited graft and with lawlessness generally.

MOTOR AGE has heretofore taken automobilists in general and those who pose as leaders in particular to task for not having given some attention to the state of affairs that exists regarding the automobile and its use. It must be admitted that it is among the possibilities that any effort on the part of the automobilists to better their condition might be for naught, in the light of all that is charged to the authorities; but, as a matter of fact, there is no way of determining such to be the case unless an attempt is made and that attempt has not been made.

MOTOR AGE has offered a number of good suggestions for the Chicago Automobile Club to follow; its own members have done likewise, but none has been followed. The condition that existed a couple of years ago exist today and will continue to exist until some activity on the part of the Chicago Automobile Club and the automobile dealers shall have been exerted by the club.

There is little need for the state of affairs that exists; it could all be remedied in a few weeks. There needs only concerted action on the part of a committee from the automobile club, another from the automobile dealers and a third from the unattached motorists. That committee need consist of but two members from each interest and that committee of six could remedy existing abuses within a single hour's conference with the authorities. The authorities are not unapproachable; they are open to receive suggestions. They are not motorists and all they hear is from the motorphobist and not from the motorist of the city.

The motorist has been charged with all sorts of crime and the evidence against him has been given the authorities in quantity. But the motorist has not deemed it worth while to clear and protect his own good name before the authorities and the public. Is it any wonder, then, that he stands convicted in the eyes of the public? Ordinarily when a man is charged with crime and evidence to prove the charge is produced, the prisoner offers some testimony in his own behalf. Frequently he is acquitted of the charge against him. But if he offers no evidence in his own behalf it is taken for granted he is guilty and he is convicted.

The motorist of Chicago today stands convicted before the eyes of the authorities and the non-motoring public simply because he has not seen fit to offer the simplest form of defense. He has left it for others to fight for him and suffers with the rest. If the Chicago Automobile Club and the dealers have not enough interest in their own welfare to step in and right matters, they are negligent. Nor is the individual motorist guiltless; he has himself to blame for all that comes to him. The case of Chicago might apply well to a great many other places, and only serves to illustrate what is probably true as to the condition existing all over.

Some day an unknown will step in and will take the bull by the horns; he will accomplish things with such ease that others who have been in a position to do something will wonder how it all came about and why somebody else didn't think about it before. Then that one man will be somebody and he will be elevated to a club presidency and possibly to the leadership of a national organization—and he will have done it without having become prominent in motoring circles simply because he had money with which to buy fine automobiles and with which to permit himself to be here and there and to be written and talked about. He will have made a name for what he did and not for what he had or what he said. He will have shown himself to be essentially a man of action rather than a notoriety-seeker.

WELCOME AN ENDURANCE CONTEST

ENDURANCE tests have been largely responsible for the great improvement made in the construction and popularity of automobiles, for they have been convincing arguments as to the reliability of the modern means of locomotion. If the new president of the American Automobile Association puts through his scheme to promote an endurance test this season it will be entered into heartily if properly conducted.

The endurance test of 1906 must not be a repetition of the 1903, however. The modern car should have no trouble to surmount the difficulties the cars of 1903 encountered, for the distance traveled then was comparatively short. The modern test must be over five times as great a distance, must encounter all sorts of roads, must include every phase of motoring except possibly speed, for this can be regulated from the standpoint of power only.

To make an endurance test at all practical at this time would require considerable planning on the part of those who assume the task, for conditions have changed materially in the past 3 years. About the only things that have not undergone changes for the better are the highways—they are as bad as ever and possibly a little worse in most sections of the country.

President Farson probably has no idea of promoting such an affair before early fall, as the makers could not possibly give it attention before that time. Without the support of the makers it would fail. The individual could not be expected to interest himself sufficiently in a particular make of car to boom it for the benefit of the manufacturer without assistance of any sort except what he might receive from his own pocketbook.

A carefully planned and well advertised endurance test, to include the commercial car as well as the pleasure vehicle, would mean much at this time, not only for the automobile trade alone, but for the good roads movement as well.

Those who visited Cuba and received a frost in that tropical country will now be able to appreciate a good thing at home.

Before another week shall have slipped past John Farson and Sidney Gorham will have found their troubles have only begun. There are more in store for them, though the exact nature of the troubles has not come to the surface.

The motor car is becoming such a rival to the railroads of the country that it would be a good scheme on the part of the latter to build automobile highways alongside of their rights-of-way and charge toll to motorists. And this is not an infeasible scheme, either.

The open winter and the lack of snow and spring rains will be the means of drying the country highways up so early that the usual cry of bad roads will have lost some of its force. But the bad roads will be there, just the same, and the absence of moisture on them will only prove what might be expected if the highways were to be drained properly.

Automobile makers and dealers were a little previous in taking the ground hog seriously this year. Just because he intimated that there would be full 6 weeks of bad spring weather from February 2 the makers and dealers believed they could make all sorts of safe promises about deliveries. But the ground hog's mistake has caused all sorts of trouble for the automobile trade in the matter of deliveries, and the worst part of the matter is there is no apparent remedy for the trouble.

Probably the authorities of Chicago are vicious toward the motorists of the west as a means of covering up some of the games of graft about which one hears so much nowadays.

The Week

Professor Elihu Thomson issues statement regarding denaturized alcohol, which is read before ways and means committee at Washington.

Consumption of fuel record of 62 miles on 2 gallons of gasoline by Berliet car in France causes comment.

Cleveland exhibition proves big success, paid attendance of 66,000 for week being reported.

Motor boat show in Madison Square garden, New York city, attracting attention in Gotham.

Megargel gets off doby roads of New Mexico; is making slow progress toward New York.

Philadelphia show now on; some exhibits slow in reaching Quaker City.

W. K. Vanderbilt, Jr., mobbed in Italy because of accident to boy.

The fact that Hemery has been whitewashed by the Darracq people in France is no sign the officials of the A. A. A. will feel any more kindly toward him. These aroundabout apologies may go abroad but they do not fit in this country.

When all other sources of attack on the automobile have ben exhausted, there will remain the one that the automobile is responsible for driving birds away from the country. That's as sensible as some other claims made against the motor car.

If Robert Lee Morrell is again made chairman of the American Automobile Association racing board it is 2 to 1 there will not be a repetition of the 1905 Vanderbilt cup race eliminating trial fiasco—and Mr. Morrell was chairman of last year's racing board, too.

If anything should be the means of consolidating the A. A. A. and the A. M. L. it ought to be the fact that one is headed by eastern men and the other by westernites. The little jealousy that has existed between New York and Chicago should have no bearing in the case.

What a convenient thing it would be if all motorists could be sons-in-law of the president so they could be immune from arrests for exceeding speed limits.

Barney Oldfield has left the stage and is to continue his track racing, believing, he says, that automobile track racing is perfectly safe. It undoubtedly is, when there is only one machine on the track, as will probably be the case in the Barney meets.

MOTOR AGE hinted some time ago that the dear old Chicago Tribune was easing up in its violence on motorists—its automobile advertising has been pretty low this spring—and nowadays a real automobile accident is dismissed with half a dozen lines.

The old saying that "he who laughs last laughs best" will apply to the local automobile shows that are taking place one after another. So far each has been the "best local show ever held," so that the last one will be "the best local show ever held." But the others will have had their inning, just the same.

It must seem sort of good to one of the common people of the automobile class to hear of the trouble of W. K. Vanderbilt, Jr., in Italy over running down a boy. The common motorist has had it rubbed into him so long that notwithstanding Mr. Vanderbilt's discomfiture the said common people will grin with delight.

SOME OF THE SIGNS OF SPRING

AS SEEN FROM MOTOR AGE OFFICE

JOHN BULL ON THE DEFENSIVE

Importers' Association Threatened if Society of Motor Manufacturers Lends Any Assistance to British Motor Trades Alliance—All-English Show Proposed

London, Feb. 17—The elements of a gale appear to be brewing over the British motor industry. The natural elements at work are the same as obtain everywhere. The artificial ones in this instance are the presence of a militant organization called the British Motor Trades Alliance. This body was founded about 2 years ago, chiefly by the initiative of Claude Johnston, one time secretary and organizer of the Automobile Club of Great Britain. Mr. Johnston, a man of catholic views, early came to the conclusion that unless a special body took up the interests of the British motor car manufacturer, and did for him a large amount of detective and detail work which he was obviously too busy to attempt for himself successfully, the foreign manufacturer would obtain a grip of the British market, not merely here but all over the world, which might never be released. He accordingly founded the British Motor Trades Alliance, obtaining for it the support of men sufficiently farseeing to appreciate its possibilities. But for some time it languished, chiefly because Mr. Johnston was too busy in more personal fields to do for the alliance what he had done for the automobile club. At a crisis which threatened extinction, the services of a real hustler in J. B. King, its present secretary, were secured and inside a year he has made it a force in the politics of the industry. Which brings the matter up to today.

Although the alliance has done a large amount of defensive and offensive work on behalf of the British manufacturer, it is no exaggeration to state that its sphere of influence has only begun to open, and standing on the threshold of that, those who have been supporting it—consisting of men like S. F. Edge, C. S. Rolls, A. Austin, C. Instone, E. Lisle, A. Govan, T. Thornycroft, Claude Johnston, J. D. Siddeley and others—all leaders in the movement on this side—approached the Society of Motor Manufacturers with a view to securing a donation from the plethoric bank account of the latter in aid of the alliance, whose income, even though assisted by generous donations from some of the men named, is obviously insufficient for the scope which it will now have to assume in the motoring world.

The society has not been unfavorably disposed to granting assistance, the sum mentioned has been $5,000, but the society does not exist exclusively for the British manufacturer, and no small share of its success up to the present has been due to the co-operation and assistance of those foreign firms which trade in this country.

In view of the militant methods of the alliance during the past 6 months, and also because those methods have begun to give very evident results in favor of the British manufacturer, this foreign element in the society intensely objects to any assistance being forthcoming out of the society's funds. C. M. Letts, who is well-known in America, having been the first British manager of the Locomobile company's organization, and at present in partnership with Charles Jarrott, the largest importer of American runabouts in England, is at the head of this revolt, and Mr. Letts said the other day that if the society lends any assistance to the British alliance, an association composed entirely of foreign importing concerns and foreign manufacturers' representatives will be immediately called into being, and will take such steps as will be necessary to convince the society that it must either choose between supporting the alliance or dividing its own house against itself.

These are big words, but from the writer's knowledge of the situation they are founded on very solid grounds, and it is probable if the society does assist the alliance, this foreign association will spring into being, not so much because of the actual grant of funds, as because the importers have arrived at the conclusion that the reprochement with the alliance by the society—which has hitherto stood off it—is merely an indication that the all-British element, having secured a preponderance in the councils of the society, will make this merely the first step towards a preferential treatment of British manufacturers, which will end in the foreigner being excluded from benefits which he at present secures by membership in the society. A cynic has said that prophecy is the most gratuitous form of error. It would be in this particular case, therefore the writer does not propose to prophesy, but it seems difficult to avoid concluding, that as matters are progressing in the British trade at the present moment the Importers' Association will be formed quite irrespective of any policy adopted by the Society of Manufacturers with regard to the British Motor Trades Alliance. At least that is the way it looks to the critics.

Foreign importers at the present time are talking under the knowledge that they are antagonistic to one another individually—just as are the British manufacturers—but on the other hand they have nobody to work for them as a whole, as the alliance is working on behalf of the mutually antagonistic British manufacturers. The society thus consisting of two discordant and equally visionary sections cannot very well assist one without irritating the other, yet it is quite easy to conceive circumstances which will probably arise compelling some form of action in this way. It is stated that the alliance has been approached with the idea of holding a purely British motor car show, and while such a show would be a mistake and a probable failure, the elements in its favor as far as the society goes, make it a standing menace. The foreign importers could similarly support an opposition show, but dependent as they are on the policy of their foreign manufacturers with regard to the Paris show, they would almost have to play second fiddle to an all-British show.

That is the situation as it stands at the present time. If the society does not assist the alliance in the manner suggested, the latter may develop into a counter organization with a more restricted policy and more concentrated effort. If it does the foreign importers will become an element of antagonism to the society and one which is not likely to be so easily subsidized into co-operation.

VUIA'S NEW AEROPLANE

Paris, Feb. 18.—M. Vuia is making experiments at Montesson with his aeroplane, which consists of a varnished silk surface which it is possible to spread wing-fashion by means of steel supports. This is attached to a light pneumatic-tired quadricycle with a 20-horsepower motor carried in a tubular framework above the driver. The motor is actuated by means of carbonic acid gas and the propelling power for aerial navigation is a screw in front of the machine. The aeroplanes are attached one on each side and the machine is operated by first starting the quadricycle with the wings closed. When the proper momentum is secured the aeroplane wings are released and then the machine is supposed to soar. So far, however, no air trips have been attempted, the tests being confined to demonstrations of the motor and quadricycle. On the road the machine runs at 12 miles an hour.

BALKS ON PRIVATE TRIALS

London, Feb. 17—The Automobile Club of Great Britain has announced in somewhat vague terms that it proposes to take action in the matter of unofficial trials of cars carried through privately by or on behalf of the motor trade. It should be premised that from quite an early date the automobile club here has endeavored to assist retail trade by undertaking the supervision of practical road tests of anything and everything connected with the motor car, and in pursuance of this policy provides any manufacturer with official supervision under certain strict conditions which ensures that the car which obtains the official certificate issued for each test shall have been rightly entitled to obtain it. That policy was greatly appreciated by the motor trade when cus-

tomers were comparatively few and were nearly all embraced inside the membership of the automobile club. Now, however, the club membership will scarcely include more than one-tenth of the motorists of this country, and in consequence the somewhat high fees and costs entailed by the club procedure make it preferable, if not necessary in some instances, to make private trials and obtain results through the publicity of a general advertisement. It is at this practice that the official announcement of the automobile club is directed, but it is obvious from the vague terms in which it is worded that the official mind observes the weakness of its position—which is the difficulty of fixing the responsibility for the carrying out of any so-called illegitimate trial. If a motor manufacturer wishes to observe the club regulation in spirit and letter, well and good, but if he desires to run with the hare and hunt with the hounds it is quite easy for him to do so. He can shield himself completely behind the action of a complacent customer. What the automobile club has done is really to appeal to the trade to discontinue the private trial, and in order to induce acquiescence it has promised to endeavor to reduce the cost of its official certificate..

TO DECIDE CYLINDER WAR

London, Feb. 16.—The wordy warfare regarding the four versus six-cylinder engined car between Messrs. Jarrott, Edge, Johnston, Rolls, Deasy & Co. has petered out to a large extent, the conclusion being that Mr. Edge has no duel to fight since his antagonists have refused his terms or he has refused theirs. But Captain Deasy is to drive a four-cylinder Martini against Mr. Johnstone in a six-cylinder Rolls-Royce under a reliability test for which is being sought the supervision of the automobile club. That much is decided on. The points upon which the contest will be settled are yet under discussion. Captain Deasy has been so stirred over the matter of duplication of cylinders that he has offered to the automobile club a $500 cup for a competition to be promoted by the club, the conditions of which will serve to decide the superiority of any particular form of multiple cylinder design from three upwards for the trade's benefit.

FRENCH EXPORTS INCREASE

Paris, Feb. 15—At a meeting of the Syndicate of Automobile Industries, held recently, it was stated that the total value of French automobile exportations during 1905 amounted to $20,053,000, an increase compared to 1904 of some $6,000,000. At the meeting it was decided that efforts should be made to extend as far as possible the use of denaturized alcohol in industrial and other vehicles circulating within Paris, in view of the heavy duties imposed on gasoline by the municipality.

TEST IS TALK OF TOWN

Parisians Interested in Berliet Feat of Running 62 Miles on 2 Gallons of Gasoline

Paris, Feb. 17—All the town is talking of the unofficial consumption test of the 16-22-horsepower Berliet car which traveled 62 miles at 46 miles an hour on 2 gallons of gasoline. The car and its occupants weighed 1½ tons and covered a marked course of 25 kilometers four times on 15.84 pints of gasoline. While none disputes the record made, for the performance has been sworn to by several prominent lights in the motoring world, yet considerable of the credit is given to the clever driving of M. Bablot, who has the reputation of being one of the most scientific drivers in Europe and up to all the fine points of getting everything possible out of a car. It is contended that a test of this sort, to prove anything, should be made with an average driver at the wheel, not an expert who knows how to keep his engine running at the most economical speed and places his tank or carbureter and adjusts the feed pipe so the temperature is sufficiently raised to admit a small quantity of gas under a large volume. Still, the critics are inclined to praise the carbureter on the Berliet, as well as M. Bablot.

Contrary to what might be expected, the Berliet carbureter has few points not found in the standard types. It is of the separate float chamber type and has its mixing chamber in the form of a vertical tubing of medium diameter, which is jacketed around the spraying nozzle, exhaust gases circulating within the jacket chambers. In the base of the mixing chamber is the spraying nozzle with its upper part surrounded by a thimble, which can be raised and lowered as the throttle valve is opened or closed. Air enters the mixing chamber beneath the nozzle and, passing within the thimble portion, mixes with the inflowing gasoline. With fast motor speeds, however, sufficient air cannot enter the thimble and the additional motor suction raises the thimble, at which time auxiliary ports are opened, admitting air to the mixture which does not pass the spraying nozzle. In this way the suction past the spraying nozzle is not unduly increased with high motor speeds, and consequently a surplus of gasoline is not drawn, which is often the case where with greater speed there is increased suction at the nozzle. It is undoubtedly owing to this peculiar fact that the fuel consumption of the Berliet car is so small. The throttle valve in the carbureter is under throttle control from the steering wheel of the car.

The clever driving of Bablot was the topic of conversation last week among motorists who dug into their memories and told of trials of similar nature in which the consumption of gasoline was so small as to excite wonder. One tradesman remembered a case where the committee in charge of a consumption test could hardly believe the winner was on the square, his record showing a remarkably small quantity of gasoline used. The committee went over the car, but found everything regular. Then it developed that the driver had dropped a small quantity of picric acid in the gasoline tank which increased his power. Immediately there was a rush on the part of French motorists to try this chemical themselves.

BRITONS IN CLUB ALLIANCE

London, Feb. 15.—In a quiet way the statement of the rapproachment between the Motor Union and the Automobile Club of Great Britain indicates that the union has made another and very significant step towards an ascendancy which was inevitable. The club leaders were instrumental in bringing the union into being, but they probably only took time by the forelock. It would have come in any case, and in acting as they did they were probably influenced by the possibility of muzzling, or at least controlling, the union in the interests of the automobile club. It did so for some time but, by stealth almost, the real position of the new body, embracing as it does motorists of every type, began to take definite shape. In the hands of Rees Jeffreys the situation was kept amicable, but there were evident signs that with the work of the union and the claims of the club overlapping, a breach would occur. Those interested in both bodies came together and the rapproachment in question has resulted. Every member of the club will be in future a unionist, with all its privileges, the club paying a yearly capitation grant. The union agrees to uphold the operations of the club in regard to trials and competitions, and generally speaking the matter is an offensive and defensive alliance. This should make for peace and quietness in any case, but in the end the Motor Union of Great Britain will control everything in motoring not controlled by the various trade associations.

GOLD CUP FOR TOUR

Paris, Feb. 16—One of the principal events in Italy during 1906 is the tourist race, organized by the Milan Automobile Club. It will take place between May 15 and 26. No trouble or expense is being spared by the promoters of this test to make it the most successful meeting of the Italian season. The gold cup which is offered to the winner, is made from the designs of Musini Maura, of Milan. Above a representation of an automobile, of which the conductor is nervously holding the steering wheel and the genius of mechanics examines the mechanism, the figure of Glory rears her lithesome form, arms raised, holding the golden cup.

OFF THE DOBY ROADS

Megargel and Fassett Once More Headed for New York—Gasoline at $1.75 a Gallon

Rio Puerco, N. M., Feb. 24.—With 30 miles of deep sand roadway between us and Albuquerque and the vast fields of adobe mud left far behind, both Fassett and myself feel confident that our troubles are over for at least a few days and that the Reo Mountaineer will soon be scudding along under full sail toward distant New York through a region whose population is other than Indians and Mexicans.

We would be in Albuquerque now only for the fact that we got lost, or at least followed a road that led to an old ford across the Puerco river that at the present time is unsafe for either automobile or horse-drawn vehicle to attempt a crossing. After wading into the quicksand and sinking waist deep at the third step, we concluded that another quicksand tieup for several weeks was rather out of order, and retraced our steps toward the distant railroad, 10 miles out of our way, where we succeeded in crossing on the trestle, not an altogether safe procedure but one far more certain than attempting to ford the quicksand bottom of the river.

About this time our gasoline gave out, necessitating a railroad trip to Albuquerque to get a fresh supply. When we left Gallup we had 10 gallons of gasoline in our main tank and three 5-gallon cans in the tonneau. At a little Mexican village of doby mud houses we purchased a gallon of gasoline for the sum of $1.75, the highest price we have yet had to pay for fuel. It was imperative that we have it and so we paid the figure asked, not, however, without kicking. This had little or no effect, as the Mexican who sold the gasoline, as well as the 400 or 500 other inhabitants, spoke no English.

At Laguna we purchased 4 gallons and took on board the two 5-gallon cans we had shipped there, but this was not enough to traverse the deep sand between that Indian town and the town of Rio Puerco, where no gasoline could be had. In other words, it has taken 50 gallons of fuel to bring our car 176 miles. This distance, however, has all been through either doby mud or deep sand where the strain on both engine and car has been something terrible. Our average day's run has been 30 miles and we have used the windlass and cable on an average of five times each day in order to get across some arroyo or mud-bottomed stream.

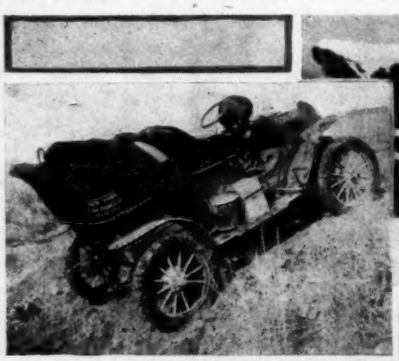
We left Gallup Tuesday noon. That night we found excellent accommodations at the section house at Guam, Mr. and Mrs. Moon, the section boss and his wife, going out of the way to furnish us with two most excellent meals and a night's lodging in a spring bed. Wednesday night we spent at Grant's. Here things were different. The new section boss had just moved in and had neither furniture nor bedding, the Mexican inhabitants refused us accommodations and the local manager for Bibo's store, although quartered in an excellent house, said nay.

Thursday night we spent in Laguna, where we found an excellent eating house and bunked for the night in an Indian's residence across the road from the station. At Laguna, which is a Pueblo Indian town of possibly 1,000 inhabitants, I secured some excellent photographs of the town with its numerous little whitewashed mud houses, all having ladders running up the sides to allow the inhabitants to gain the roof in case of attack by an enemy.

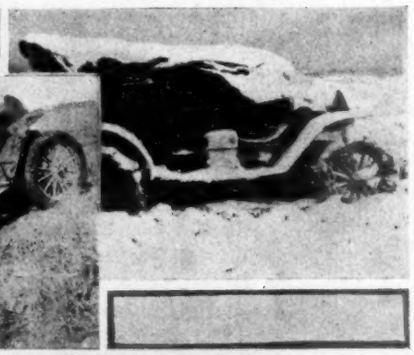
The weather for the past week has been all that even an automobilist could ask for—cold nights and warm during the day. There is a heavy frost each night and the ground remains frozen solid until about 10 o'clock in the morning. Tuesday night we ran into a bog that refused to allow us to go forward or backward. We shoveled the doby mud from around the wheels and walked to the section house, where we spent the night. Returning to our Reo Mountaineer early in the morning we got over this soft spot while the ground was frozen solid.

Coyotes have been thick all the week and we have amused ourselves by banging away at them from long range, without, however, doing any damage to the animals.—PERCY F. MEGARGEL.

NO LYING—TACKLE WAS USED



MEGARGEL'S MORNING SURPRISE



GOOD ADVERTISEMENT FOR WEED

HONORS FOR THOMAS

Buffalo Car Makes Fastest Time and Wins Stiff Hill Climb at Los Angeles

Los Angeles, Cal., Feb. 22—In the annual hill-climb held today the Thomas won the event for touring cars listing at over $2,500, the Stoddard-Dayton captured the honors in the class for touring cars listing at $2,500 and under, the Reo won in the division for touring cars $1,500 and under, the Franklin scored in the runabout free-for-all section, the Buick landed the laurels for runabouts $1,500 and under, while it also took first place in the contest for runabouts $1,000 or less. The course was 3 miles long, with an altitude at the start of 904 feet and 1,500 feet at the finish. Half way up there was a zig-zag that nearly turned over some of the cars. About thirty-five machines, representing eighteen different makes were entered. The officials were: Referee, W. M. Garland, Los Angeles; Judges, E. R. Braley, Pasadena; William Thayer and William Mackie, Los Angeles; timers, George H. Frost, Pasadena; W. D. Loveitt, Los Angeles, and Roy Hillman, Los Angeles; starter, Charles Burman, Cleveland, O.; clerk of the course, W. R. Reuss, Los Angeles. Timing was by telephone. The Home Phone people strung wires and placed instruments all along the course. Starts were announced by telephone, the starts being 5 minutes apart. The following results were reported:

TOURING CARS, OVER $2,500

Car	Time
1—Thomas	4:58 1-5
2—Pope Toledo	5:04 3-5
3—Pope-Toledo	5:06 3-5
4—Packard	5:24 3-5
5—Thomas	5:33 1-5
6—Franklin	6:19 1-5

TOURING CARS, $2,500 OR LESS

Car	H. P.	Time
1—Stoddard-Dayton	30	6:25 2/5
2—Stevens-Duryea	20	7.02 3/5
3—Frayer-Miller	24	7:03 1/5
4—Franklin	12	8:22 1/5
5—Winton K	30	8:43

TOURING CARS, $1,500 OR LESS

Car	H. P.	Time
1—Reo	16	6:57 2/5
2—Buick	22	7:35 1/2
3—Reliance	18	8:09 3/5
4—Rambler	20	9:14 4/5

RUNABOUTS, ANY PRICE

Car	H. P.	Time
1—Franklin	30	6:32 3/5
2—White	20	7:14 1/5

RUNABOUTS, $1,500 OR LESS

Car	H. P.	Time
1—Buick	22	6:05
2—Reo	16	6:41 1/2
3—Ford F.	14	6:48 2/5
4—Premier	16	6:56 1/5
5—Wayne	20	7:52

RUNABOUTS, $1,000 OR LESS

Car	H. P.	Time
1—Buick	22	6:07 1/5
2—Ford	14	7:07
3—Wayne	20	7:25 1/5
4—Autocar	8	7:57
5—Gale	8	10:09 1/2

The 1906 Thomas took both the big punch bowl for the best time and the

big touring car cup for its class, covering the course at 36 miles an hour average, part of the way going above 55 miles an hour. This car was received from the factory 2 days before the contest and belongs to Thomas Hughes, of this city, who had never driven it. It carried four passengers averaging over 150 pounds each and full road equipment. The driver was Frank Siefert.

Second honor went to a 1906 Pope-Toledo belonging to the agency here and driven by Charlie Davidson, of Minneapolis. A Pope-Toledo owned by Mrs. E. C. Anthony and driven by her chauffeur, Tommy Pillow, lost second place by only 2 seconds.

From the upper half of the course a view was unfolded that Californians claim cannot be equaled anywhere else in America. The highly developed and thickly settled San Gabriel valley in the foreground, forms a checkerboard of more than 100 square miles, while farther on toward the ocean are the broad valley of the Los Angeles river and the narrow ones of the Arroyo Seco and the San Fernando. Rimmed around on three sides are the mountains and off to the south, the straight side of this great letter D, is the grand old Pacific ocean. All was clear, clean and sharp today, for late rains had washed out the atmosphere as was done by kind old nature for the endurance run last month. Talk about automobiles turning out to races—there were nearer 1,000 cars than 500—all kinds of power, each in goodly numbers and imported cars of all leading makes, too. Fortunately, all that Piedmont region back of Pasadena, where the course was, is cut up into squares, so there were plenty of cross streets. These vantage points were well filled with both motor cars and horse-drawn vehicles, but the former predominated. Along the course were many palaces, winter homes of eastern millionaires, and their yards were sprinkled with the big cars, mostly imported.

At the start several blocks of the wide avenue was filled, as Pasadena had turned over Los Robles avenue to the motorists and her little sister, Altadena, had given over Santa Rosa avenue, the last half of the course.

Everybody said the course was too easy, but the last 3 days all makes of cars were tried out and lots of prospective entrants got cold feet after reaching the poppy fields the first time. Both turns on Woodbury road, though but an eighth of a mile apart, were, as E. R. Thomas said, "enough to give you heart failure." Several of the cars which came up the first leg of the course too fast could not make the first turn and had to shoot off into a convenient field.

CUP DONOR IN DANGER

W. K. Vanderbilt Threatened by Italian Mob—Americans Show Interest in Trophy Races

New York, Feb. 26—The Sunday newspapers devoted a great deal of space to the accident experienced by W. K. Vanderbilt, Jr., in Italy on Friday. A number of the facts brought out regarding the donor of the Vanderbilt cup were remarkably interesting because of their errors, while pictures printed of Mrs. Vanderbilt ran all the way from patent medicine advertisement cuts to reproductions of famous pictures by Landseer. Out of ten pictures published of Mrs. Vanderbilt only four were actual portraits of her. The latest reports from Florence are to the effect that Mr. Vanderbilt was detained only 4 hours in the police station, and that the authorities seized his car as bail pending the result of injuries to the boy, Adolfo Pescini. The doctors who examined the lad said that in about 20 days the cut in his head would be healed, and that the boy would be running around long before that time.

SHARP TURN IN THE ROAD

ROAD SEEN FROM MOUNT LOWE

BUICK ON LOS ANGELES HILL CLIMB

It is surmised that the danger from the mob must have been threatening for Mr. Vanderbilt to draw his revolver. All who know him feel that this is about the last thing he is apt to do under anything like ordinary provocation. Mr. Vanderbilt is essentially cautious and tactful, even when handling high-powered cars. He is not apt to lose his head, when the unexpected occurs. A dispatch to the Herald states that Mr. Vanderbilt left Pisa for Monte Carlo on Sunday. He refused to say anything regarding the accident.

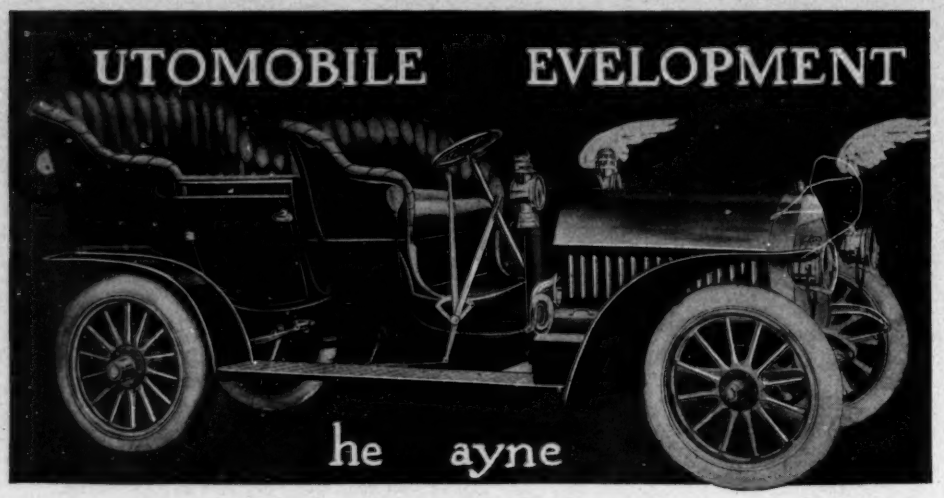
There is more interest shown in the Vanderbilt cup race this year than ever before. Even those who felt aggrieved at the result of the eliminating trials of last year are now talking excitedly of plans for this year's trial. Among the cars which are said to be in course of preparation for the race are White and Stanley steamers. Mr. Stanley announced at Ormond that he was going to build a car which was capable of going several hundred miles and that he intended to compete in the big road races held this year. The White people have never been really out of the racing game, though they have been short of a driver since the unfortunate accident to Webb Jay, who, it is said, expects to be in condition to drive next fall and will be given the opportunity to gratify his ambition by attempting the winning of the Vanderbilt cup race.

In gasoline cars, the Pope company has already made entry. It is said there will be three Pope-Toledo racers entered in the eliminating trial. The Thomas people, undismayed by the decision of last year, are said to be building a racing car, the construction of which is being kept secret at the Buffalo factory. It is said that it will be in excess of 100 horsepower. J. D. Maxwell is already hard at work on the construction of a 100-horsepower Maxwell racer which will undoubtedly be driven by C. W. Kelsey. It is also said the Franklin, Royal, Haynes, Matheson and Premier machines used last year will be rebuilt for the Long Island circuit. Christie will again be seen in a fore-and-aft driven car embodying some new departures in construction which he has been working out lately. There is a great deal of talk of the entry of Ford and Wayne cars, while the newly-formed Bliss company, of Brooklyn, is said to be at work on two racers, one of which is to be driven in the Vanderbilt race trial. These cars are being built under the supervision of George Kennan, the French constructor brought to this country by Douglas Andrews, who now controls the Bliss output of automobiles.

There are a number of other makes of cars which according to rumor will be on the list of competitors, but the names given are those of which there seems to be good reason to believe actual entries are contemplated.

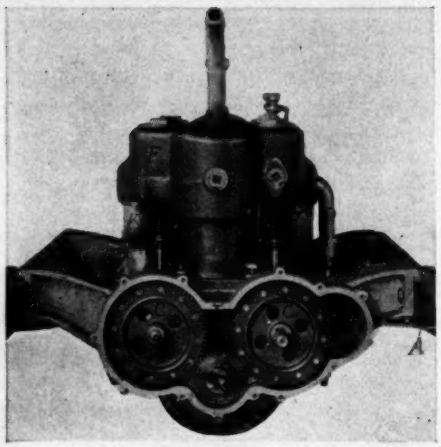
CATCH PYRENEES CUP THIEVES

London, Feb. 15—The thieves who stole the Pyrenees cup from the de Dietrich stand at the late Olympia show, or at least some of them, have been captured and at the Clerkenwell country court today were sentenced to 12 months' imprisonment and 3½ years' penal servitude, respectively. They confessed to having broken up the artistic trophy for the sake of the few pounds' worth of silver in it.



WAYNE cars show decided changes over those of last year, both in power as well as material, design and workmanship. Five models are listed for the present season. Three of these are new products, while the other two are styles carried over from last season with a few slight changes. To enumerate, the Wayne models are: F, new, 50 horsepower, featured by cylinders in pairs, sliding gear transmission with Hess-Bright bearings and shaft drive; K, new, 35 horsepower after the design of F, with parts made smaller; H, new, a 14-horsepower runabout with a pair of opposed cylinders carried crosswise beneath the bonnet and connected with a back axle through a planetary gearset and propeller shaft; B, 24-horsepower machine, carried over from last year, with a vertical four-cylinder motor having cylinders separate castings, and the drive being through a sliding gearset and shaft; C, also carried over from last season, a 20-horsepower car with a pair of cylinders carried lengthwise beneath the body and having its drive through a planetary gearset and single chain.

In the three new cars, nothing radical has been attempted, the object of the company apparently being to build simple machines, having parts generally interchangeable and motors with ample power. The cars in general are strongly built. Hess-Bright bearings have been introduced in the gearboxes of the two larger cars; annular ball bearings are generally used in the road wheels; pressed steel frames are uniform except in the case of the runabout, where angle iron is used. Valves are invariably mechanically operated and in the vertical motors are placed oppositely; grinding of the cylinders and pistons is noted; cone clutches are regularly furnished except in the runabout, in which the multiple disk type is used; and in the braking system those for regular use are of the external band type. The emergencies are of the internal expanding design. The exclusive use of shaft drive on all the cars, except C, the oldest model, marks the concern a pronounced devotee of this type of transmission. In three Wayne motors the bore

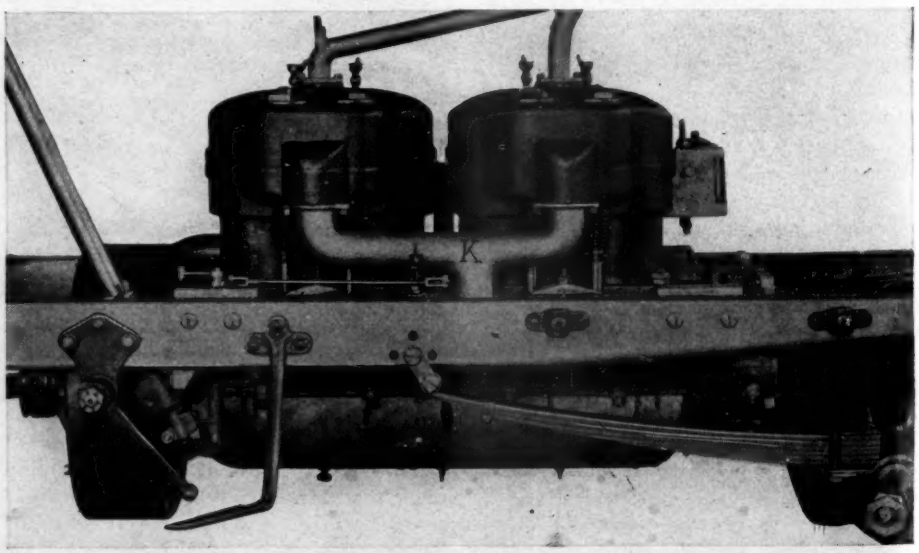


WAYNE 50-HORSEPOWER MOTOR

is made somewhat larger than the stroke.

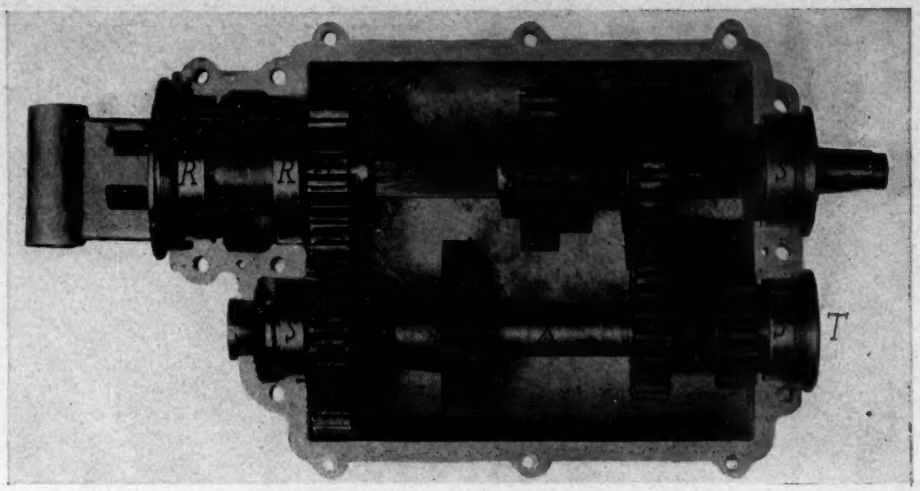
Model F, the 50-horsepower car, with its four vertical cylinders cast in pairs and each having a bore and stroke of 5½ and 5 inches respectively, is the leader and the 35-horsepower car Model K, with its cylinder measurements, 4¾ and 5 inches respectively, is a close second, being intended for purchasers desiring a medium-powered machine. A description of the larger car serves also for the 35-horsepower machine. In casting the upper half of the crankcase, four integral arms are made use of for supporting the motor directly on the side pieces of the main frame, obviating the use of the subframe. Where the frame pieces take the motor support, they are reinforced by brace pieces, A, shown in the view of the front end of the motor at the right. These pieces fit within the frame channel, filling the entire space, and have a central eyehole for receiving the horizontal bolts, which secure the motor arm to the frame. To lend additional stiffness, the arm has a shoulder resting on the top channel piece. A further point, exhibiting nice construction, is that an integral aluminum pan extends between the arms on either side and meets the bottom of the frame piece, furnishing a good apron for excluding mud and dirt. In keeping with present tendencies, the top portion of the crankcase supports the motor bearings. The bottom half is divided into two compartments, one for the front and the other for the rear pair of cylinders, and serves as an oil reservoir. It can be removed when examinations of the crankshaft or connecting rods have to be made, side inspection plates not being used. An aluminum housing, B, is made integral with the case and with its cover furnishes an enclosed compartment for the half-time and pump gears. Both half-time gears, C, have bronze centers and hub parts pinned and keyed to their respective shafts and have fiber rims carrying the teeth, which rims are secured by a series of pins shown. The crankshaft gear, D, of hardened steel, is keyed and pinned in position and the gear, E, on the end of a separate shaft which carries the pump, is similarly attached.

Looking over the cylinder castings, it will be noted that the inlet valves are carried in the bottom of ports, F, on the right side, with the exhausts in similar ports on the left. Both of these ports are kept reasonably small and carry expansions, H, for receiving the inlet pipe, K, and the exhaust pipe, L, the expansions permitting of large sized valves and



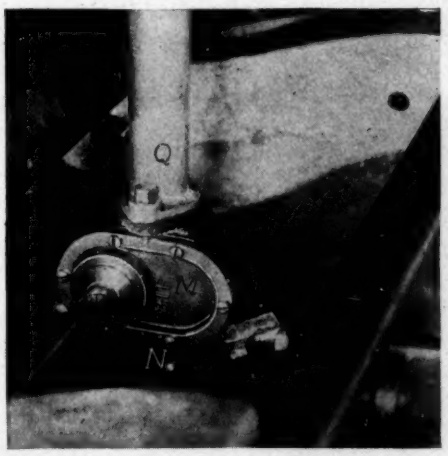
WAYNE 50-HORSEPOWER MOTOR, INTAKE SIDE

large intake and exhaust piping without abnormal valve ports. So much care has been taken in the matter of interchangeability that the inlet and exhaust valves, each 2⅜ inches in diameter, are interchangeable. If necessary, the intake pipings, K, can be interchanged with the exhaust pipings, L, and by changing the timing the exhaust side of the motor made the intake, and vice versa. The cylinder castings are integral throughout, are finished by a grinding process and the arched top shows that the head of the combustion chamber is correspondingly arched. There is a similar arch given the piston head, making the center ⅝-inch higher than the sides, thus producing a combustion chamber of slightly conical design. The crankshaft, a three-bearing forging of conventional lines, runs on three bronze bearings, each 4½ inches in length and carrying a babbitt lining. It has a uniform diameter of 1 1/7 inches. The pistons carry four compression rings, three above and one beneath the hardened steel wrist pin, which is made with a ground finish and is pinned at both ends to the piston journals, the pins in turn being secured by bent wires. Bronze constitutes the connecting rods, which are non-adjustable at the piston end and are horizontally split at the crankshaft end, a cap being secured by a set of stout bolts with castellated nuts and cotter pins. Both camshafts, of hardened steel, are ⅞-inch in diameter and work in three bearings, each 4 inches long, the supporting metal being a lining of babbitt in a bronze base. The cams are pinned in position. Intake and exhaust valves have the stems and heads forged integrally, the former 7½ inches in length and ⅜-inch in diameter. Pushrods of standard design are used; they work in bronze guides in the top of the crankcase and have rollers on the lower ends for bearing on the cams. In the end view of the motor it can be noted that the valve springs are given a barrel shape with a large central diameter, which is reduced to where the spring is supported on a cup-shaped washer pinned to the bottom of the valve stem and are considerably less reduced towards the top. Carrying both camshafts within the crankcase permits of their being lubricated from the splash and further allows of easy removal. Bronze guides, on which the pushrods operate, are held in place by a yoke and central bolt. A glance at the right and left sides of the motor shows the simplicity of the inlet and exhaust pipings, K and L, the latter being an integral casting with a branch to each pair of cylinders, whereas the former is of the Y variety. McCord copper-asbestos gaskets are fitted in all of the unions.



SLIDING GEARSET USED ON WAYNE 50-HORSEPOWER CAR

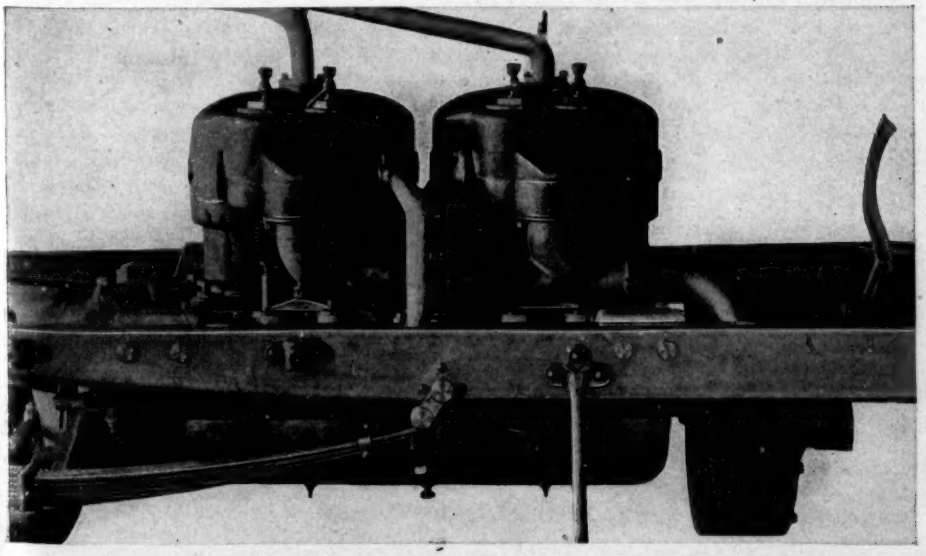
WAYNE CIRCULATING PUMP



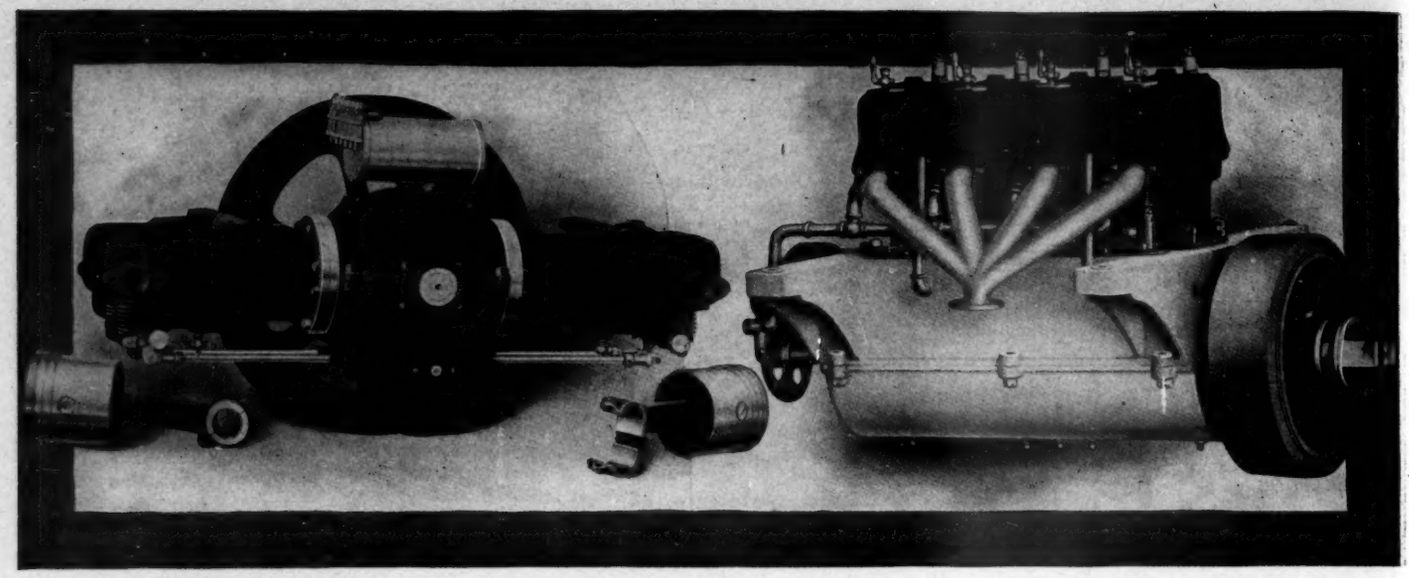
In lubricating the motor, a four-feed McCord oiler, carried well to the rear, is used. On the dash are four sight feeds through which the oil passes before being conducted to the crankcase by as many separate leads. Water cooling is accomplished through a Briscoe cellular radiator, from the base of which the water is drawn by a Lipman pump, M, carried on the metal pan at the left side of the motor, the frame work of the pump being bolted directly to the pan. The pump shaft, P, is driven by spur gear off the camshaft. A rubber hose serves to connect the radiator with the pump, it passing beneath the motor pan and entering the pump through a tubing, N, passing through the pan. Water is delivered through a vertical pipe, Q, to the cylinder pairs at the left, the water entering the ports adjacent to the exhaust valves. From the head of each cylinder pair the water exits through an aluminum piping to the top of the radiator.

Ignition is by jump spark, with spark plugs carried vertically in the caps over the intake valves. Current comes from a storage battery and is taken through a four-vibrator coil located on the dash through a LaCoste timer, carried on the rear end of the camshaft. Control both of the carbureter and commutator is from the hand wheel on the steering column. The carbureter used is the Universal, made by the Speed Changing Pulley Co.

The transmission of power to the back axle starts with an internal, leather-faced, cone clutch carried within the flywheel and entirely enclosed. A short shaft connects the male portion with the gearset. The latter, of the sliding type, gives three forward speeds and one reverse, and is characterized by the use of five Hess-Bright bearings, two carrying the forward end of the main shaft, shown at R, and the remaining three, S, being at the front and rear of the countershaft and the rear



WAYNE 50-HORSEPOWER MOTOR, EXHAUST SIDE



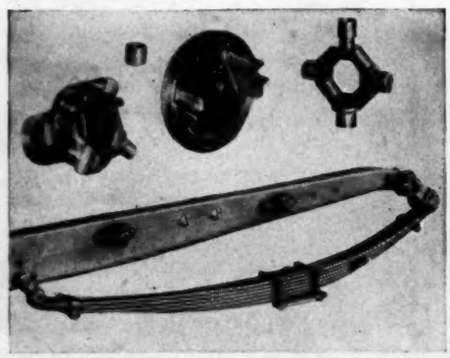
WAYNE MODEL C, 20-HORSEPOWER MOTOR

RETAINED MOTOR DESIGNS

WAYNE MODEL B, 24-HORSEPOWER MOTOR

of the main shaft. Bronze caps, T, thread into the ends of the gearcase to protect the bearings from dust. The gearbox, an aluminum casting, is divided horizontally in line with the main shaft, W, and countershaft, X, both of which are carried in the same horizontal plane. One sliding unit, Z, consisting of two gears, formed integral with the connecting sleeve, serves for giving the forward speeds and reverse. On high speed, drive is direct by the use of dental clutch teeth, Y, one set on the forward end of the sliding unit, Z, and the other on the rear surface of the gear, J. In all the other drives, power is first transferred to the gears on the countershaft, X, and then back to those on the mainshaft, W. The interior of the gearbox is scraped, in order to avoid particles of the casting breaking off and getting between the gears. Drive to the back axle is through a jointed shaft of the standard type. The axle itself, of floating design, is carried on ball bearings throughout, there being two sets for each road wheel support, two others for carrying the differential and two for supporting the short shaft at the end of the propeller shaft and which carries the bevel pinion meshing with the large bevel on the differential. Accessibility is assured by splitting the differential housing horizontally. By slightly withdrawing the drive shafts to each road wheel and by removing the bolts which retain the differential bearings in position, the entire gearing may be lifted out. The drive shafts have a squared fit with the differential members and are similarly inserted in the jaw clutches by which the power is transferred from the drive shafts to the road wheels. The steering gear is of the worm and sector type, carried in an oil-tight case, with provision for keeping the entire gearing packed with grease. The shaft carrying the screw runs in a bronze collar at each end, the upper one provided with adjustment and lock nut for end thrust, as well as with an oil cup. The sector, carrying the spark and throttle levers, is independent of the movement of the wheel.

The running gear of the car is characterized by the same simplicity of parts as is noted in the motor and transmitting plant. In the frame work are pressed steel side pieces, 3¾ inches in depth at the center, 1¾ inches at the rear end, 1¼ inch in front. The pieces, made straight throughout, have a regular outside width of 32 inches. Three cross-pieces are needed, all of which are at the rear, two aiding in supporting the gearbox. Unions between these cross-pieces and the main parts are strengthened by a double set of gusset plates riveted in position. A modern front axle is shown in the form of an I-section, nickel steel, weldless forging which has a width of 2 inches and a central depth of 2½ inches. In order that the motor may be carried entirely in the rear of the front axle, a wheelbase of 117 inches is needed, and to further assist, the front springs, which are 40 inches in length, are offset on the spring seating, that part of the spring in front of the seat being 16 inches in length, whereas the rear part is 24, a construction which gives a rather peculiar appearance, as shown in one of the illustrations. In the rear, semi-elliptic springs, 59 inches in length, are required, but these are not offset on the seatings but



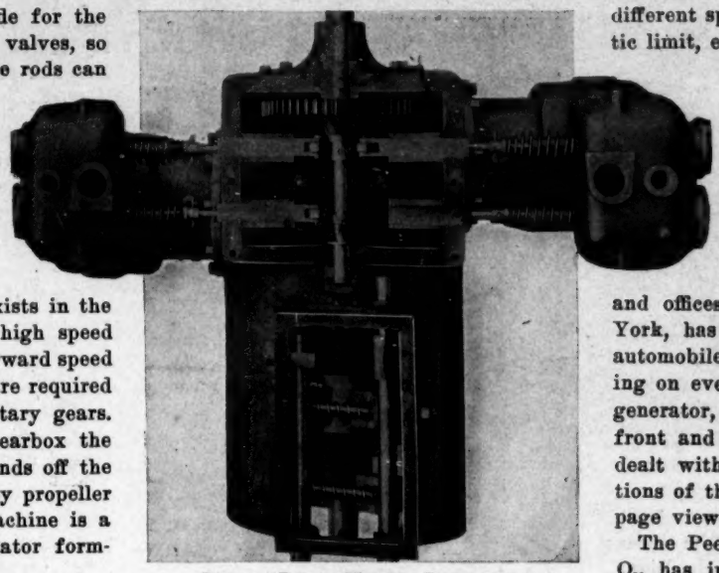
WAYNE JOINT AND FRONT SPRING

are thrown outside of the frame pieces. They are 2 inches in width, the same as the front ones, but carry eight leaves, whereas those in front have but six. In the brake system is a camel's-hair lined, regular brake on the propeller shaft, immediately in the rear of the gearbox. Within the drums on the rear hubs are internal expanding emergency brakes which, in both the large cars, have bronze shoes acting directly within the metal drums. Both set of brakes are connected with the clutch, disengaging it when applied.

Points about the model K car which differ from F are: Wheelbase, 107 inches; weight, 2,100 pounds, instead of 2,400 pounds, and wheels 32 inches in diameter and carrying 4-inch tires in place of 34-inch wheels, with 4½-inch tires. The body work in both models is up-to-date, possessing high finish, wide side entrances, hollow metal dashes, leather upholstering, running boards and the usual fenders.

The Wayne runabout, model H, has its pair of opposed cylinders with a bore and stroke respectively of 4½ inches and 4 inches. Like many motors of this type, carried crosswise in front beneath the bonnet, the crankcase and gearbox form an integral casting, which also encloses the clutch, the flywheel being carried at the front of the crankcase. The case proper is a long, partly cylindrical, casting with the front end partly open to receive the bearing cap for the front end of the crankshaft and the rear end entirely open, so all of the gears in the planetary gearset can be removed, as shown in one of the illustrations. Accessibility is assured by having that part of the top above the crankshaft left open and having further a large plate covering the entire top of the gearset chamber. The two cylinders bolt to the sides of the case in the usual manner. Valves are carried in ports on top of the cylinder ends and are removable through openings provided with threaded caps. The cover to the crank-

case serves as part of the guide for the squared pushrods operating the valves, so that with it removed any of the rods can be lifted out and the entire camshaft also removed. The clutch, not shown in the illustration, is of the multiple disk style, with one set of disks attached to the crankshaft and the other to the shaft of the gearset. It operates in oil. Nothing out of the ordinary exists in the planetary gearset. On direct high speed drive is direct; on the other, forward speed and the reverse friction bands are required in bringing into use the planetary gears. In the exposed view of the gearbox the coil springs for keeping the bands off the drums can be seen. Drive is by propeller shaft. Externally the little machine is a typical 1906 car with its radiator forming the front of the bonnet.



POWER PLANT WAYNE RUNABOUT

Concerning the models carried over: B is a four-cylinder machine with four separately cast cylinders mounted vertically beneath a forward bonnet. The bore and stroke are 4 and 5 inches respectively. Valves are carried oppositely, with intakes on the right. The use of four radiating pipes from the carbureter to the four cylinders is novel, as is a similar piping on the exhaust side. The gearbox contains a standard sliding set, affording three forward speeds and a reverse, with direct drive on the high speed. Plain bearings are in use with babbitt carried on bronze bases as the wearing surface. A gear interlocker prevents the shifting of gears with the clutch engaged. Final drive is by propeller shaft and floating rear axle. In the running gear the frame pieces are made parallel throughout, half-elliptic springs are regular equipment, the wheelbase measures 102 inches, wood shoes are installed in the emergency brakes, a tubular front axle is used and tires are regularly 32 by 3½ inches. Model C follows that line of construction in which two 5¼ by 5-inch cylinders are carried lengthwise beneath the center of the body at the left and in which the planetary gearset is mounted axially in line with the crankshaft with the flywheel and sprocket for single chain drive mounted between them. Under a false bonnet are carried the twelve cells of battery in double sets of six and a large gasoline tank. The frame is a pressed steel rectangle, supported on half-elliptic springs in front and rear. The latter rests on a running gear possessing as its important points live back axle, 90-inch wheelbase, 30 by 3½-inch road wheels, tubular front axle 2¼ inches in diameter and Brown-Lipe differential.

MOTOR CAR LITERATURE

Special grades of steel, as manufactured by Fried Krupp, Essen, Germany, for motor cars, are described in a large size catalogue now being distributed by the American representatives, Thomas Prosser & Son, Old Colony building, Chicago. Fourteen grades of steel for automobiles are referred to and a description of each given and the many uses of it enumerated. In addition, large illustrations show the many parts of motor cars made from each particular grade. The grades mentioned are: Motor car steel, weldable motor car steel, special steel, another grade of special steel, special nickel steel, a second grade of special nickel steel, two grades of motor car steel for case hardening, two grades of mild nickel steel for case hardening, special spring steel, hard crucible steel and steel castings. The tensile strength of the different specimens is given, as is the elastic limit, elongation and contraction. Torsion tests of the metal are illustrated, in which a bar of metal is first given one turn, then three, later twenty-one and three-quarters, and finally twenty-nine, without the bar breaking or cracking.

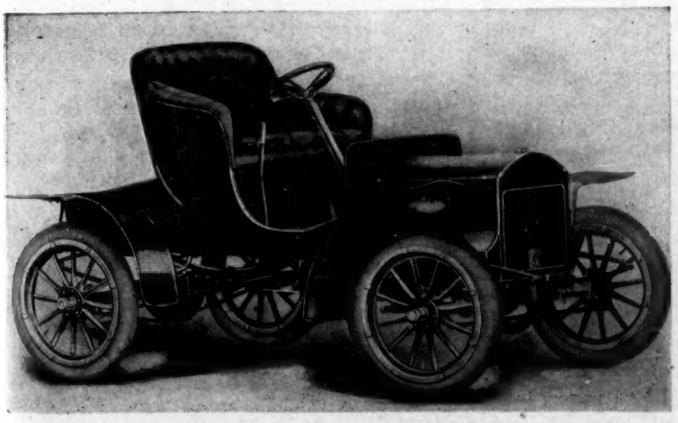
The Johnson Service Co., with a factory at Milwaukee and offices in Chicago, Boston and New York, has in the interests of its steam automobiles an exhaustive catalogue treating on every part of the car. The steam generator, burner, engine, transmission, front and rear axles and other parts are dealt with in detail. Full page illustrations of the cars and about a dozen half-page views of parts are included.

The Peerless Motor Car Co., Cleveland, O., has in circulation a little folder on the Peerless gentleman's roadster that was shown at the New York and Chicago shows. Besides a view of the car, a complete table of data is included.

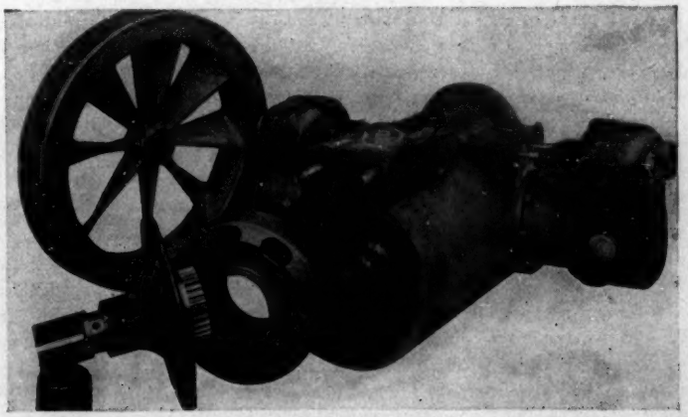
The Tincher Motor Car Co., Jackson boulevard, Chicago, Ill., is mailing to the trade a large-sized cardboard poster carrying a side view photograph of the Tincher 50-horsepower car. The effect is in dark gray.

In its latest catalogue the George N. Pierce Co., Buffalo, N. Y., tells the story of the Pierce 1906 car in an interesting way. Apart from this the feature of the book is the series of full-page colored views of the complete cars with various body designs. The views are about the best shown so far this season.

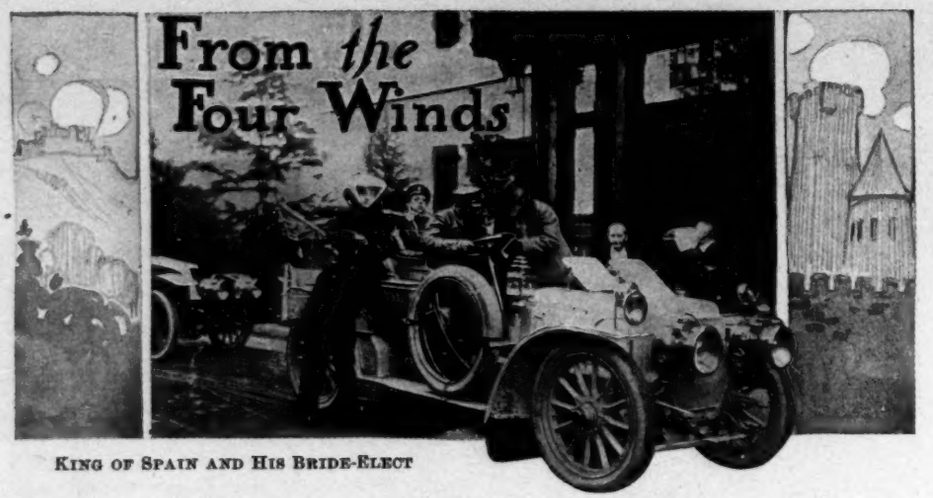
George B. Crane, manager of the Chicago branch of the Knox Automobile Co., of Springfield, Mass., takes special interest in the commercial side of automobiling, and has compiled a series of tables containing data on the performance of Knox trucks and delivery cars. Some tables cover 2 and 3 months operation of a truck and show every cent needed for repair, length of time wasted in making repairs, as well as replacements needed, nature of streets traveled over, loads carried each day, distances traveled, stops made, time needed and gasoline and oil consumed.



WAYNE TWO-CYLINDER RUNABOUT



RUNABOUT MOTOR, SHOWING END OF GEARSET



KING OF SPAIN AND HIS BRIDE-ELECT

Darracqs on Deck—Two cars have been entered by the Darracq people in the European tour proposed by Marquis de Dion. They are the first made for the big contest.

Kaiser was There—Emperor William attended the dinner of the Imperial Automobile Club of Germany, delivering a speech and assuring the motorists of the deep interest he takes in automobiling and the industry.

Fournier Subscribes—So far $2,450 has been subscribed to meet the expenses of the grand prix to be run over the Sarthe circuit in France. Henry Fournier heads the list with $1,000. The Zust, made in Italy, will be represented in this race by two cars.

Spanish Road Race—Enthusiastic Spaniards propose an international road race on the occasion of the marriage of King Alfonso to Princess Ena of Battenberg. The course suggested is between Barcelona, Saragossa and Madrid, a distance of about 400 miles. The condition of the roads, however, may kill the project.

Close Call—Motorists at Tiffin, O., have been enjoying the winter weather by racing over the ice on the Sandusky river. This almost resulted in a serious accident, for Professor Lewis Shuler struck a large air hole in one of his flights of speed. Luckily the momentum of the car carried it across and the professor escaped a bath in the river.

Walker Wakes 'Em Up—Dave Hennen Morris, president of the Automobile Club of America, is in New Orleans, attending the Mardi Gras. Discussion of the John Brisben Walker plan for an automobile highway across New Jersey is being indulged in by New York trade enthusiasts as well as members of the A. C. of A. The concensus of opinion is that the scheme is not as wild a one as was at first supposed. It is now believed that if an arrangement can be made in New Jersey to set aside certain roads as automobile highways, there will be a solution of the legislative situation in that state. Up to now the New Jersey lawmakers have not vouchsafed any explanation of the situation regarding the Frelinghuysen and Jackson bills. Some statement of the proposed revisions in these two measures is expected later in the week.

Laggards Not Wanted—According to the decision of the committee in charge of the French grand prix, cars 3 hours behind at the end of the first day's racing will be ruled out of the contest.

French Show Figures—The last French show had 1,180 exhibitors and 500,000 paid admissions. The official figures are given as follows, the number of exhibitors first, then the paid admissions: June, 1898, 340; 140,000. June, 1899, 405; 150,000. January, 1901, 490; 160,000. December, 1902, 560; 190,000. December, 1903, 810; 230,000. December, 1904, 1,054; 360,000. December, 1905, 1,180; 500,000.

Six-Cylinder Test—S. F. Edge recently gave his six-cylinder 40-horsepower Napier a consumption test over the Great North road, running out of London for a distance of 200 miles. The highway was in poor shape and the mercury hovered around 31 degrees, yet the six-cylinder, weighing, with passengers, 4,237 pounds, covered the double century at the rate of 18.2 miles an hour, using 10 gallons 2 quarts 1 pint 4 ounces of gasoline, traveling 18.78 miles on each gallon. The trial was made under the auspices of the Automobile Club of Great Britain and Ireland.

University Interested—In a recent issue of the Electric World there appeared an editorial calling attention to the need of experimental knowledge of the requirements for igniting gas in the cylinders of automobile engines. Professor J. W. Esterline, of the department of electrical engineering of Purdue university, has decided to undertake an investigation along the lines suggested. A comprehensive study is to be made of the ignition apparatus now on the market. This will comprise a study of magnetos, coils, batteries and the sparking devices. Parallel with this there will be conducted another series of tests for the purpose of determining the limitations of and if possible the ideal conditions for the igniting of gas. Variations of capacity, inductance, current, electro-motive force, compression and quality of the mixture will be made, and the effect of these variables studied.

Milan Test—The Milan gold cup tourist endurance test is now taking definite form. The distance to be run will include some 2,500 miles in Italy, descending as far as Naples and Rome. The trials will last 11 days. The prizes amount to $20,000.

Marseilles Show—From the 15th to the end of April will be held the international exhibition of automobiles at Marseilles. There were at first to be two shows, but it has been decided to amalgamate them into one. Italy will be strongly represented in the show.

Austin Hollers—Members of the Austin Automobile Club, a Chicago organization, protested at their last meeting at the alleged persecution of the park police, and adopted a resolution presented by their ex-president, Joseph H. Francis, in which the club is pledged to fight the west park board every time a member is arrested for violation of the speed ordinance. When fines are imposed the case will be carried to a higher court and injunctions will be sought to prevent the board from interfering until a final verdict has been had.

Pittsburgers Tourists—Touring promises to be popular among Pittsburg motorists this year. European travel is going to be heavier than ever before and the procession of tourists in California and Florida is unusually large. One of the most popular trips is from Pittsburg via Erie and the Lake Shore road to Buffalo, then through New York state to Long Island or New England. Another favorite route for tourists is from Pittsburg to Philadelphia via Greenburg, Bedford, Chambersburg, Gettysburg and Lancaster, which takes one through much historic country and unparalleled scenery.

Syracusans in Snow Ride—E. F. Simmons, of the Amos-Pierce Automobile Co., of Syracuse, N. Y., with a Stevens-Duryea car, made a notable winter trip through bad roads and snow banks from Cortland to Syracuse in 2 hours and 10 minutes. A snow storm and sharp wind struck the automobilists in the face but they kept at it. Although they were obliged to slow up in passing through several snow banks, especially near Homer, not a stop was made until Syracuse was reached. In some places the snow banks were higher than the machine and in other places the car would settle down to the hubs, breaking through the ice over a mud hole. The low gears were used but four times and the intermediate gear only in the heavy snow. For the most of the way the high gear was used. When the party arrived at the Amos-Pierce garage the car and its passengers were pretty well covered with ice and snow and the wheels were one solid mass. Ice was frozen on the fenders to the thickness of 2 to 6 inches. The distance was 36 miles and considering the

hills and the roads the run was wonderful. Two hours is considered good time even in the summer when the roads are at their best around Syracuse.

Buckeyes Organized—A new organization, to be known as the Sandusky County Good Roads Association, has been organized at Fremont, O., for the purpose of bettering the roads throughout the county.

Wants Duty Off—Congressman James H. Southard is working to get the duty off fuel gasoline. The congressman is an Ohioan, and will soon have in his possession a petition from the power and motor boat owners of his section of the country, when the matter will be presented before congress.

After Scorchers—Borough officials throughout the state of Pennsylvania have been urged by the state highway department to report all unlicensed automobiles owned by citizens in their jurisdiction. It insists that all boroughs are compelled to enforce the automobile law of April, 1905.

Want Country Club—The Automobile Club of Pittsburg has a committee hard at work on the country club house proposition. Two desirable sites are under consideration. One is a plot of 10 acres above Springdale on the north side of the Allegheny river. The club can purchase this property for $30,000 or rent it for $1,500 a year for 10 years. The other property is a 60-acre farm near Oakmont on the south side of the Allegheny river which could be used for golf links and general club purposes. Much to the surprise of the general public, the three-story automobile club house erected 2 years ago at Baum and Beatty streets, East End, is practically deserted. The reason given is that it is too near the starting point and that a club house in the country would serve a much better purpose.

Likes Motor Cycle Cops—So well satisfied is Director of Public Safety Potter, of Philadelphia, with motor cycle cops as an aid in keeping the growing automobile traffic on Broad street within bounds that he will ask the council to appropriate $3,000 for the purchase of thirty of the two-wheelers. Discussing the subject, the director said: "The results that have come from trials of all makes of motorcycles prove that it is the up-to-date method of directing traffic on such streets as Broad street, and I believe can be utilized for those suburban sections of the city where there are smooth roads. In addition, I believe it will be economical, In the tests that have been made the machines have been operated at a high and a low rate of speed, and careful notes made as to their durability. I have had a policeman try the machines out on Broad street, and the results have been most satisfactory. The modern automobile is far ahead of the bicycle. But put a policeman on a motor cycle and he will catch up to the speed law breakers."

Going Some—Van Wert county, O., has expended upward of a half million dollars for the improvement of its roadways.

As Hemery Tells It—Since his return home Hemery has been quoted in L' Auto as follows: "I did what I intended doing, viz., showing the Americans that Europe could produce a car to hold its own with anything produced on the other side. But because I was not all smiles and full of sweet talk, they took a dislike to me. As to the timing—well, the officials added or deducted fractions of seconds as they saw fit. My car is the fastest in the world, but I traveled no faster at Ormond than I did at Arles."

Drivers with Jobs—The foreign racing men will be placed as follows this year: Heath, Teste and Tart, Panhard; Baras, Barillier and Lebrun, Richard-Brasier; Gabriel, Rougier and Duray, de Dietrich; Sisz, Edmond and Richer, Renault; A. Clement, Villemain and De la Touloubre, Clement-Bayard; Hemery, Wagner and Hanriot, Darracq; Le Blon and Charles, Hotchkiss; Taveneaux and Renonce, Gregoire; Felser and Chanliaud, Gardner-Serpollet; Jenatzy and De Caters, Mercedes; Lancia, Cedrino, Cagno and Nazarri, Fiat; Clifford Earp, Napier; Salleron and Leger, Mors; Rigolly, Gobron; Vitalis and Juvanon, Rochet-Schneider; C. Dufaux, Dufaux; Raggio, Itala.

Who Will Be Chairman?—There is considerable suppressed interest in the coming directors' meeting of the A. A. A., scheduled for March 8. It is expected there will be something doing in the racing board situation. There is no intimation of where the choice of the directors will fall for chairman of the racing board, in case Mr. Morrell insists on declining a reappointment. S. B. Stevens, of Rome, N. Y., is the latest man to be mentioned for the position, if a new chairman is to be selected. Mr. Bowden and Mr. Stevens up to date are the only men who have been mentioned for the position, and it is not known that either will accept it. There is a well defined suspicion that the chairmanship is a drug on the market, as it was a year ago, when Mr. Morrell stepped into the breach. Other matters dealing with legislation and organization will be discussed by the A. A. A. directors at their next meeting, and the Glidden tour will probably be the subject of some discussion.

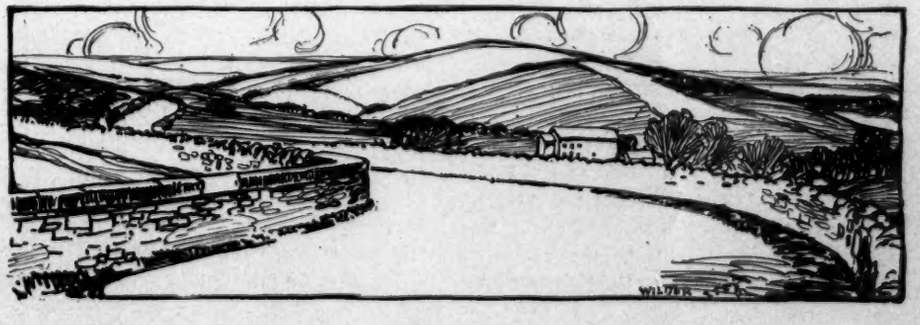
Long-Distance Bee—The Royal company plans for a series of long-distance trials to be held on Glenville track, Cleveland, this year, the idea being to demonstrate what the machine can do in 1,000-mile or 24-hour non-stop trials.

Jardine in a Drive—Robert Jardine, of the Royal company, drove from Cleveland to Buffalo and return recently, doing the distance of 424 miles in 16½ hours. It is reported that the roads were in bad condition at the time.

Maxwell Test—It is said the Brooklyn representatives of the Maxwell car will conduct a 6-day non-stop and economy test through the streets of Brooklyn within a month. Charles Earl is expected to be one of the drivers. Various other stunts are talked of but have not assumed the concrete form of announcements yet.

Hoosier Hill Climb—Carl Fisher, an Indianapolis dealer, is promoting a hill climb in his town, proposing that the test be held on the old Michigan hill, a mile northwest of Crown hill, the second Tuesday in May. A committee of Indianapolis dealers will handle the event. The hill is on a pike and is about a quarter of a mile in length. One of the features of the card will be a test for heavy trucks. The affair may be thrown open to everyone, but this has not been definitely settled as yet.

Mayor Weaver Witty—Mayor Weaver, of Philadelphia, was the guest of honor at the banquet of the Germantown Automobile Club last Saturday night. Members and guests to the number of 120 filled the banqueting hall in the clubhouse, and listened to the quips and stories told by the speakers. The mayor was quite happy in hitting off the peculiarities of his automobiling friends, and made some apt allusions to unskillful driving on his part which resulted in the smashing of a machine—a political machine—last fall. Judges, bankers, railroad officials, merchants, physicians and others prominent in the community were at the board, and under the proddings of the club's toastmaster, H. K. Duffus, chairman of the banquet committee, many of them retailed their automobile experiences for the benefit of the assemblage. The Germantown club has a large waiting list, and a doubling of the facilities is seriously contemplated in the near future.



The REALM of the CAR

TO Syracuse is given the honor of being in the advance guard of cities where commercial automobiles are used by business men. The first milk wagon run without horses has appeared on its streets and is daily attracting attention. The machine cost $2,000 and was manufactured by the Vehicle Equipment Co. of Long Island. Not every farmer who peddles milk in the streets of Syracuse can hope to do it with an automobile, even though it is an expense-saving device. This machine is owned by the Tully Farms, which has a certified milk farm at Tully, about 30 miles from Syracuse. The milk is shipped by rail and is delivered by the automobile. This Tully place is not an ordinary farm. It belongs to the great Solway Process Co., which employs 3,000 men manufacturing soda ash, and which is one of the principal industries of Syracuse. Not only does the automobile deliver milk, but it carts potatoes and other produce from the railway station to the works of the Solvay Process Co. for use in its eating rooms.

The milk delivered in this automobile is not ordinary milk, and the butter and cream are used only by the 400. The milk brings 10 cents a quart, where milk delivered by horse and wagon brings only 5 cents. The cream brings 55 cents a quart and butter 40 cents a pound. It is obvious that people must pay when an automobile brings milk to their doors.

It is only fair to say, however, that the reason for the increased price of the milk and butter lies not in the fact that it is delivered by an automobile, but in the way the farm is run. The employes have to wear sterilized duck clothing and are examined as to their health every 2 weeks. They wash before milking each cow. The machinery and cans are all sterilized and expert doctors keep the milk free from germs.

The milk is put up in bottles, which are packed in zinc-lined cases and taken to Syracuse. The automobile, which is kept in the Amos-Pierce garage when not in use, goes to meet the train at the Lackawanna station at 8 o'clock in the evening and takes the milk to the store in East Onondaga street, in front of which the automobile is often seen standing. The machine is then taken to the garage, where it remains all night and is charged. At 5:30 o'clock the next morning William Huttleson, the driver, takes the machine out and starts on his route, which takes him all over the city. He gets through about 1 in the afternoon. Usually in the afternoon he has to draw produce to the Solvay works.

The expense of maintenance is about $1 per day. The machine has been in use only a few weeks, but during that time the route has greatly increased, and it now does the work of two horses and wagons. It has forty-four eleven-plate batteries with a capacity of 140-ampere hours. It has an electric brake for emergency and is lighted inside by two electric lights. Thus far there has been no trouble in running through the snow and mud and carrying as heavy loads as can be put on. It takes about 5 hours to charge the machine. It weighs 6,300 pounds, is equipped with two motors of 3½ horsepower each and will carry 100 per cent overload. It makes 25 to 30 miles a day on its regular route, carries eighty cases of milk, and has a divided seat with controller in the middle. The tires are Firestone hard rubber.

SYRACUSE MOTOR MILK WAGON

MAIL ROUTE A SUCCESS

After a month's trial, the automobile mail route of the Roswell Automobile Co., carrying mail from Roswell to Torrance, N. M., is pronounced a great success by all connected in an official way with both ends of the enterprise. The postal officials are highly satisfied with the results and the automobile men are pleased with the ease with which they are now able to make these 111-mile trips each way every day. The mail route started January 10, the company having secured from Uncle Sam a contract covering a period of 4 years 6 months, dating from the first of the year. It is the first long contract for the delivery of mail over a long distance route in the United States, and the longest distance over which mail is carried regularly anywhere in the world, except one case in South America, so far as the postoffice department is informed. This is certainly a testimonial to the enterprise of the southwest, and particularly of southeastern New Mexico.

No sooner had the Roswell company been awarded the contract for carrying the mails than it proceeded to make plans to do the work in approved style. Three new machines were bought to add to the complement of two large and one small machines, already in the passenger service of the route. The three machines purchased were of the Buick make and of 27 horsepower each. In order to have them at Roswell at the earliest possible time they were sent by express at a cost of $675. All arrangements were perfected by January 10 and on that morning the first trip under the new contract started.

The first 50 miles of the route were covered on schedule time, but from that point on the hardships came thick and fast. The thin skip of snow in the Pecos valley was changed to a bank 3 feet deep on the high plains in the Torrance country. The proximity of the mountains had shown itself there and the snowfall had been tremendous. For a while the automobile fought through the snow, teams having gone before and plowed a track, but when it reached 3 feet, and sometimes 4 feet, the car finally floundered, and was not able to go. Manager Stockard of the company was close behind the mail car, with a supply of everything needed on such an excursion, but his machine was soon forced to stop also and the men made plans for a night on the plains. Charles Sharp, chauffeur on the mail car, took the mail sacks and walked to a ranch house, secured a horse and rode to Torrance with the mail.

At this same time the Rock Island rail road was blocked by snow not a hundred miles away, and for 4 days the Golden State Limited was unable to reach El Paso. Is there any wonder that an automobile could not force its way across the trackless plains? For 3 weeks the town of Capitan, N. M., on a branch road, was without a train. Is there any wonder this initial trip of the automobile mail route resulted so disastrously under existing conditions?

But the snow did not last. In 3 days it melted and the proposition was started anew under different conditions. While the roads were in bad shape the route was made in 8 hours and as Uncle Sam had been liberal with time when he drew up his contract, this 8-hour run was considered satisfactory. But now the roads are dry and fairly hard. The run is being made every day in 6 and 7 hours. The mails are brought from and sent to Torrance every day. A few days ago an automobile came tooting up to the Roswell postoffice with two passengers and a bag of mail from Kansas City, Chicago and the east that beat the railway mail service from the same places 7 hours. The automobile route brings mail to Roswell from

all over New Mexico 24 hours earlier than it was ever brought before. So everyone has pronounced the automobile mail route a success.

There was nearly a fatality in making the first run of the automobile mail route. There was one passenger in the car, E. A. Winter, an easterner who had been in Roswell prospecting and wanted to go to Albuquerque and Santa Fe. He became impatient when the automobile broke down in the snow and, when told that there was a ranch house 15 miles away, decided to walk to it, although advised and urged not to attempt it. He started out alone in the direction of the ranch and walked through the snow until tired out. He laid down in the snow for 10 minutes, but roused himself again to keep from freezing to death, only to discover that he had lost his bearings entirely. By this time the wind was blowing piercing cold and Mr. Winter realized that he must do something or die. He would not give up, but walked and walked and walked. At 3:30 the following morning he saw in front of him the abandoned automobile which the other men had deserted for the midway house.

He had walked all that time in a huge circle and had come again to his place of starting. With the last of his strength, he climbed into the mail box and covered himself up to keep warm. He was rescued the next morning by another automobile which had come with new men to try to push on to Torrance. The experience was one that will do him a lifetime, he declares.

New Mexico has a second automobile line. Seeing the big business of the Roswell-Torrance route, E. C. Sperry has established an automobile stage between Dawson and Raton, in the north central part of the territory. These towns are about 25 miles apart. They are in a mountainous country, but the run is made from Raton to Dawson in 1 hour 45 minutes and the return trip in 2 hours, Raton being much higher than Dawson. Mr. Sperry has two Reo cars and he has about all the passengers he can take care of. The two towns have poor railroad connections. Men who have made the trip by rail and in wagons declare the automobile route the greatest improvement possible.

GOVERNMENT BUYS TRUCK

The Knox Motor Truck Co., Springfield, Mass., with H. A. Knox as president, recently received an order from the United States government for one of its standard trucks. The government expert who purchased the truck did so after having made an examination of the many different makes and having tested representative trucks for varying trips with different loads. The truck is to be used at the Springfield armory in its home city. The company has further completed its plans for the disposal of its trucks throughout New England, having decided to handle all of this territory direct from the factory, whereas all business outside of this territory will be through agents.

HELPED OUT POSTOFFICE

Detroit, Mich., while a leader in the manufacture of pleasure automobiles, is not going to take a back seat in the commercial game, a good evidence of which spirit was shown during the Christmas holiday rush when the postoffice officials called into service four delivery wagons made by the Rapid Motor Vehicle Co., of Pontiac, Mich., to assist in distributing Christmas mail. In previous years the postoffice accommodations were insufficient for the additional mail, and clerks and delivery men worked unceasingly all day in the effort to remove the innumerable bundles. The result of the use of the four delivery wagons was shown by the Christmas bundles being cleared from the office by 10:30 in the forenoon. The delivery work was systematically conducted, a company driver and postoffice clerk accompanying each wagon. Apart from the larger loads carried than by the regular mail wagons the fast speed made was the biggest gainer, the little wagons doing more than three times the distance of the horse wagons in less than half the time. As the illustration shows, the wagons were of the standard type, not being especially prepared for the work other than attaching government mail signs to each side of the box and to the rear door. The power plant in these wagons is a pair of opposed water-cooled cylinders with the motor crankshaft connected through a planetary gearset and single chain with the center of the live rear axle. Solid tires are used.

RECEIVES COMMERCIAL CARS

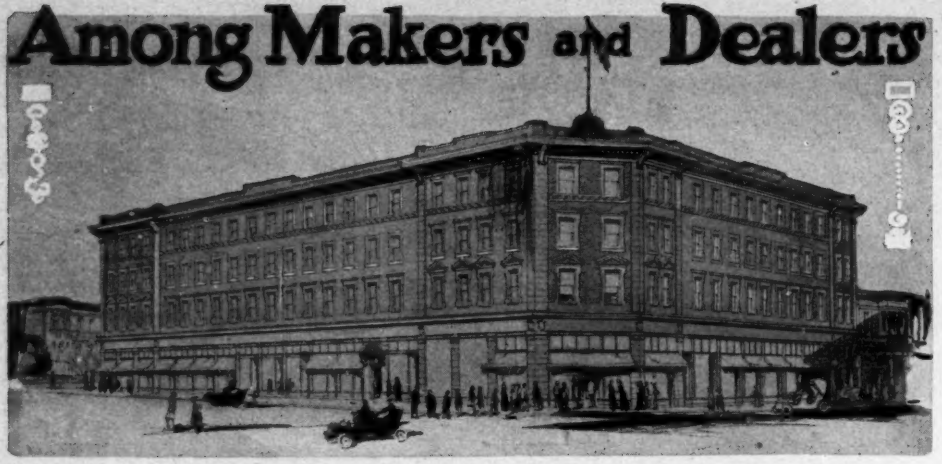
Packard trucks, of 1½ tons capacity, were delivered this week to the New England Furniture Co., and to the J. F. Wilcox Lumber Co., Minneapolis, by the Pence Automobile Co. These are among the first deliveries of commercial vehicles in the Twin cities for 1906, and they are to be followed by the installation of many other big trucks and special delivery vehicles. Commercial cars are being considered by some of the largest mercantile and manufacturing concerns of the two cities, and many deliveries will be made in the early spring.

OFFICIALS GET CARS

Municipal officers of Minneapolis and St. Paul are to be provided with automobiles for their daily work. The Minneapolis park board has appropriated $3,500 for the purchase of an automobile for the use of Superintendent Wirth, of the park board, and the St. Paul park board has made an appropriation for the purchase of a car for Superintendent Nussbaumer. The St. Paul city council is now struggling with the proposition of providing a car for City Engineer Rundlett.

AIDING THE POSTAL AUTHORITIES IN DISTRIBUTING MAIL—LINE-UP OF RAPID CARS AT DETROIT

Among Makers and Dealers



SAN FRANCISCO BRANCH OF WHITE SEWING MACHINE CO. AS IT WILL APPEAR WHEN COMPLETED

Using Pantasote—The use of Pantasote for covers for road maps is noticed.

Asks for Outdoor Show—The city fathers of Buffalo have decided to extend an invitation to the American Motor Car Manufacturers' Association to hold its proposed outdoor show next fall in Bisontown.

Harburg Locates—The Harburg Tire Co. has secured a permanent location in New York at 232 West Fifty-eighth street, where a complete tire repairing outfit will be installed. The company will occupy the entire building.

Thery's Company—The retired champion driver of the world will call his latest venture Thery & Co. He will establish companies in both England and France, his capitalization being $500,000. Thery will be works director, M. Chedru technical adviser and M. Lejay general manager.

May Deliveries—Deliveries of Jones-Corbin cars, manufactured by the Philadelphia firm of that name, will, it is announced, begin about the middle of May. But one type is being built—a 40-horsepower touring car. The company has recently been recapitalized, and large additions made to its facilities.

More Room for Prest-o-Lite—The new plant of the Prest-o-lite company, at 24-26 East street, Indianapolis, will be ready for occupancy about April 1. The building is three stories in height, each floor 40 by 95 feet in dimensions, and representing a total of 9,000 square feet. The location is within two blocks of the C., H. & D., Big Four, Pennsylvania, Monon and Vandalia railroad tracks.

Elyria Hustles—The little city of Elyria, O., is making strenuous efforts to retain the plant of the Garford company. A short time ago A. L. Garford announced the Cleveland and Elyria plants were to be consolidated and that while he would like to locate the new merged plant in Elyria, there were not houses enough in town to accommodate the 1,200 employes that would be employed at the plant. So the citizens are hard at work raising a fund to build houses and from present prospects they will be successful. About half a million dollars' worth of houses will be required.

Branch in Cleveland—The Cleveland business of the Studebaker company will in the future be handled through a local branch in charge of J. M. Starkweather. The company has opened a store on Ninth street.

Winton Garage Opens—The Winton company made use of its new garage in Cleveland the first time last week. It is located immediately adjoining the old store and it gives the company about twice the former capacity.

Fire in Buffalo—The George N. Pierce Co. announces that a fire at its plant last Sunday night destroyed one of the outlying buildings used for automobile storage, motor testing, bicycle assembling and storage repair department. While the bicycle business will be seriously interfered with, the blaze will only temporarily hamper the shipment of touring cars of Pierce make.

New Scheme—The Automobile Clearing Co., which was recently incorporated in New York by members of the trade, will not actually deal in second-hand cars. Anyone wanting to sell registers his car for a nominal fee and the car is advertised through various channels by the company. It costs the intending buyer nothing to register and no commissions are charged when sales are effected. According to the explanation of its officers, the concern will occupy a field entirely new.

Wilson Changes—Charles B. Wilson, who has been general superintendent of the Detroit and Lansing factories of the Olds Motor Works for several years, has resigned to accept the management of the New Ferro Machine & Foundry Co., formerly the Hoffman Hinge & Foundry Co., at Cleveland, producer of automobile and marine engine castings. The company is also going into the manufacture of marine engine and automobile parts on a larger scale, having recently put up and equipped a building to be fitted entirely as a machine shop, 250 feet long by 100 feet wide, equipped with automatic machinery for the rapid production of motor parts of all descriptions.

Wayne Appointments—Agencies for the Wayne have been placed as follows: Dante Cusi, Michoacan, Mexico; Clyde A. Gates, Fort Dodge, Ia.; H. R. Manecke, Decatur, Ill.

Will Make Motors—The DeLong Co., of Syracuse, N. Y., is to incorporate soon with $25,000 capital to manufacture gasoline motors. George E. DeLong and Frank P. Costigan are back of the scheme.

Death in the Trade—Theodore Jonas, prominent in the automobile trade of Milwaukee, died last week. He had conducted a big garage in the Cream city since 1901, being a bicycle manufacturer before that.

Pope-Waverley Agents—Peck & White, Fall River, Mass.; Peoria Automobile Co., Peoria, Ill.; L. W. Pond Machine & Foundry Co., Worcester, Mass., and the Hampden Auto Co., Westfield, Mass., will handle the Pope-Waverley line for 1906.

Australia Active—Reports from Australia apparently indicate that the automobile trade there is in a healthy condition. Sales of small horsepower vehicles are frequent throughout the entire colony, and in New South Wales alone no less than 1,000 machines are in use. Several big automobile clubs have been formed.

Carbureter Forces Working—Both the factory and assembly forces of Wheeler & Schebler, manufacturers of the Schebler carbureter, Indianapolis, have been doubled since January 1. Wheeler & Schebler report they are now shipping their goods to more than 100 automobile and marine engine builders in the United States and Canada.

Still More Room Wanted—It was not so very long ago that the Timken Roller Bearing Axle Co. practically doubled the capacity of its plant, but now it finds itself in a similar fix, so another enlargement has been decided on which will double its present capacity. The new buildings will be equipped with the automatic sprinkling system.

White Garage in 'Frisco—The White Sewing Machine Co. has broken ground for an automobile garage and office building of four stories on the corner of Van Ness and Market streets, San Francisco. The land has been leased for 20 years at an aggregate of more than half a million dollars. The estimated cost of the building is $135,000, approximately. The structure will contain headquarters for the company's sewing machine shop, containing 12,000 square feet of floor space, with hard white maple floors. The shop will contain traveling cranes which will go to every part of it, and will be fitted with machinery and special tools for automobile repairing exclusively. There will also be a paint shop and upholstering department for refinishing old cars. The

garage room will store 250 automobiles and there will be salesrooms and lounging rooms on the second floor for the company's customers.

Alden Timken Man—H. W. Alden, formerly with the Electric Vehicle Co., and later with the Pope Mfg. Co.'s commercial truck department, has joined the engineering staff of the Timken Roller Bearing Axle Co.

Foreign Rumor—Paris reports there is a prospect that the C. G. V. company will be purchased by an English syndicate. While no definite deal has been made, it is said at the company's branch on the Avenue de la Grande-Armee that negotiations are on foot.

Wayne Non-Stop—A. L. Kull, manager of the Wayne Automobile Co., of New York, is preparing for a 6-day non-stop run through the streets of Gotham. There is no speed bee buzzing in his bonnet and he will keep well inside the law, the mark he is aiming at being 1,152 miles, which is the best possible running at the legal speed limit. The car will pick up passengers from time to time at 1659 Broadway.

Big Rambler Shipment—Thomas B. Jeffery & Co. last week made what they believe to be the largest individual shipment of automobiles on record, sending a solid train of seventeen cars containing fifty-two surreys type 1, fourteen surreys type 3 and one type 2 to the San Francisco agency of the company. The freight charges aggregated $6,630. The entire lot is billed direct to the 'Frisco branch.

Omaha Show—Dates have been selected for the Omaha show, it having been decided to hold the affair April 4, 5, 6 and 7 in the Auditorium. The five dealers in the city have taken all the space.

Henshaw to Move—C. S. Henshaw, the Thomas Flyer's representative in Boston, has leased a front portion of the Park Square automobile building for temporary quarters while he is seeking a location for a new store.

His Third Shop—An automobile repair shop trust, on limited lines thus far, is a-borning in the Quaker city. Henry A. Rowan, Jr., who already conducts shops at 1205 Sansom street and at the Belmont Auto Station, near the Forty-fourth street entrance to Fairmount park, has just opened another at the Aldine garage, 2028-2030 Sansom street.

Southern Hustle—The Southern Automobile Co., of Nashville, is preparing to celebrate its removal to its handsome new garage on Broadway in rather an unique way. In the center of the garage will be placed a row of tables and a royal feast will be spread in commemoration of the occasion. The new garage of the Southern company is said to be one of the handsomest in the south and has a storage capacity of 6,000 square feet. Repair shops are in the rear of the building, while salesrooms are at the front. A huge revolving hardwood turntable has been established in one of the three big show windows and a 1906 White steamer is to be placed thereon.

Battery Plant Enlarging—A four-story addition, 100 by 200 feet, has been completed by the National Carbon Co., at Fremont, O. The company will manufacture all kinds of batteries and will soon be employing 500 men.

Using Steam Now—The Renard trains, which were a novelty at the 1904 Paris show, were, it will be remembered, operated by gasoline motors. The makers have now discarded this system and have adopted the Gardner-Serpollet steam propulsion.

Last Reo Agency Placed—R. C. Rueschaw, assistant superintendent of agencies for the Reo people, announces that last week, when he assigned territory to the Milwaukee branch of the McDuffee Automobile Co., he had placed the last Reo agency he had left.

Searchlight on Roof—To supply its western trade, a branch office has been opened in Chicago at 1328 Michigan avenue by the Rushmore Dynamo Works, maker of the Rushmore Navy Standard searchlights and Rushmore gas generators. A unique feature of the store will be the big 18-inch electric projector seen at the Rushmore stand at the New York show. This projector, which is a regular Rushmore navy searchlight, will be mounted on the roof in view of the street, and its beam will nightly be visible for miles.

THE READERS' CLEARING HOUSE

ADJUSTING CARBURETERS

Austin, Tex.—Editor MOTOR AGE—Please inform me through the columns of the Readers' Clearing House the most economical and practical way to adjust a carbureter. The carbureter is a Holley and is on a 1906 Oldsmobile. Should the needle valve be closed and the throttle opened or vice versa?—Subscriber.

It is necessary in all carbureters to obtain as near the correct proportion of air and gasoline as possible—in other words a good mixture, as it is called. The motor should be run at normal speed when adjusting a carbureter, but it must be remembered that while the motor speed may be normal with the car standing still, it will require more power to keep the motor at this speed when pulling the car. If the motor is sluggish try cutting down the amount of gasoline. The mixture should be obtained by so regulating the needle valve and air valve as to give the motor the desired speed with the use of as little gas and as much air as the motor will stand. If the motor misses explosions it might be caused by either too rich or too light a mixture. It is best to begin by allowing the motor to take in a good quantity of air and to feed the gasoline to this. It may be necessary to cut down the supply of air gradually until the right combination is reached. The quickest way is to have somebody adjust the carbureter who has had experience.

BRAZING CRACKED CYLINDERS

Plain City, O.—Editor MOTOR AGE—Kindly give me your advice through the Readers' Clearing House as to the best way to repair a cracked cylinder. The engine is double opposed, 4⅜-inch bore, with 3/16-inch cylinder walls. The cylinder is bolted to the base with six ⅜-inch stud bolts through a flange ½ inch thick. The flange is cracked away from the cylinder close in the corner, where the flange is at right angles to the cylinder. I have been advised to solder the crack and then solder brass plates between the stud bolts, but do not think this would hold. I have also been advised to braze the flange on, but am afraid that would warp the cylinder, as the walls are very thin from re-boring. Please advise me as to brazing on this kind of repair, and also name some firm which does such work.—L. E. ROBY.

It would be impossible to use solder on this repair. The National Brazing Co., 83 West Jackson boulevard, Chicago, makes a specialty of brazing cast iron and is the only concern known to MOTOR AGE that does this work.

POWER COMPARISONS

Clatonia, Neb.—Editor MOTOR AGE—Please tell me through the Readers' Clearing House the horsepower that may be expected from a four-cycle motor of 4½ by 4 inches at 600, 1,000 and 1,500 revolutions per minute; also a four-cycle motor 4 by 5 inches at the same speeds of the crankshaft. Which is the better for high speed work, assuming each is correctly designed? What power would the same motors develop if they were of the two-cycle pattern?—F. W. J.

The inquirer does not state the amount of compression, weight of flywheel, etc., so that it must be assumed these are to be what would be proclaimed correct in common practice. If the motors of the sizes named were well made there would be little difference between one of 4½ by 4 inches and one 4 by 5 inches. The former would figure out 2.66 horsepower at 600 revolutions, 4.44 horsepower at 1,000 revolutions and 6.66 horsepower at 1,500 revolutions. The 4 by 5-inch motor would give 2.7 horsepower at 600 revolutions, 4.5 horsepower at 1,000 revolutions and 6.75 horsepower at 1,500 revolutions. The 4½ by 4-inch would be preferable for high speed work, owing to the shorter stroke of the piston.

Current Automobile Patents

Adjustable Steering Gear—No. 813,186, dated February 20; to J. Warrington, of Indianapolis, Ind.—On the bottom of the cylinder column of the inventor's steering gear is a worm secured in the usual manner and on a cross horizontal shaft is a toothed sector in the form of halves carried on the same shaft and coinciding with each other. Projecting to the rear from these sector parts are two arms which have a connection through a buffer on one and a corresponding union on the other. The object of the device is the taking up of jar through the buffer and the divided two-part sector.

Speed Recorder—No. 812,937, dated February 20; V. Koblizek, Salmthal, Austria—This speed recorder for automobiles is enclosed within a cubical box and receives its motion from a small pulley A which is made to contact with the road wheels or receives drive from them through a belt or other means. The pulley is carried on a shaft within the box. On the shaft is a fixed sleeve C and a sliding sleeve F with a pair of bowed springs D carrying suitable weights connecting the fixed and sliding sleeves. Fixed to the sliding sleeve is a brace carrying on its outer end the rack H which has meshing with the rack teeth, a gear K in turn geared to a small pinion on the indicator L. With fast revolutions of the shaft B the weights E on the springs D carry the centers of the springs out, owing to centrifugal force, at which time the sliding sleeve F is drawn toward the stationary sleeve and with it the rack H. This movement of the rack H results in a part revolution of the gear K and a part circular movement of the indicator L.

Three-Part Tire—No. 812,893, dated February 20; to E. F. Sobers, Bethlehem, Pa.—Three solid tire pieces A, B and C repose on a band E surrounding the felloe of the tire. Pieces F and G, the latter integral with the part H, retain the three tires in direct position and side flange rings W and D retain the ring H and the tires in position. A central bolt passing through the felloe and ring piece assist in securing the tire in position.

Divided Wind Shield—No. 812,928, dated February 20; to G. W. Kerr, Springfield, Mass.—What might be called a two-part wind shield is referred to in this patent. The shield is intended for use above the dash of an automobile and consists of a bottom stationary glass part equal in height to the level of the driver's shoulder. Above this is hinged another part which when needed can be carried vertically above the lower and stationary part; if not needed it swings forward, resting in a horizontal position above the motor. Both parts are supported by angular braces rising from the sides of the motor.

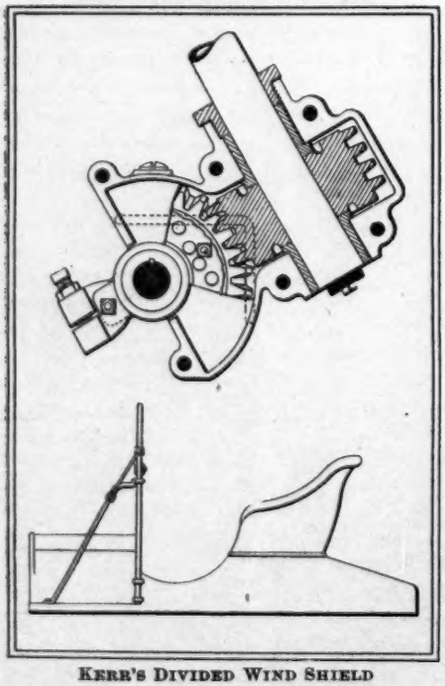
Blower for Air Cooling—No. 813,204, dated February 20; to Lee A. Frayer and William J. Miller, Columbus, O.—The device referred to is the blast cooler used on the Frayer-Miller motor cars. It is in the form of a rotary fan carried on a shaft above and parallel with the front end of the crankshaft. This shaft is driven from the crankshaft through spur gears; a small one on the blower shaft and a large yielding gear on the crankshaft, the object of the latter being to relieve the blow of the strain when starting the motor. As the blower travels much faster than the crankshaft, this is essential. The motor is cranked by the blower shaft.

Front Wheel Drive—No. 813,213; dated February 20; to Warren S. Johnson, Milwaukee, Wis.—In the front of the body of his motor wagon is a turntable which supports the motor and also carries the front axle, which is of the divided type with a central differential connecting the respective halves. The motor is connected with the differential by chain and on each half of the axle is a band brake by which one-half of the axle can be stopped rotating and the road wheel on that side also stopped. This scheme is used in steering so that in turning a corner instead of using a hand wheel with steering knuckle a turn to the right can be made by applying the brake on the right half of the driveshaft, and the right wheel being held stationary, or nearly so, the left travels in a circle around it until the brake is released. Using the turntable in the bottom of the floor and carrying the motor on it causes the entire power and transmitting parts to turn at the same time. The diameter of the turntable is equal in length to the width of the car body and consists of a large metal circle supported in a metal ring piece in the car body floor.

Intake Pipe Cut-Off—No. 813,316, dated February 20; to M. Munzell, Brunswick, Germany—In the pipe leading from the carbureter to a gasoline motor for conducting the mixture to the cylinders the inventor has designed a butterfly valve of the accepted style but to which he has connected means by which the valve can be held open for any desired time, by which it can be closed and kept so or by which it can be permanently held in a position between wide open and shut.

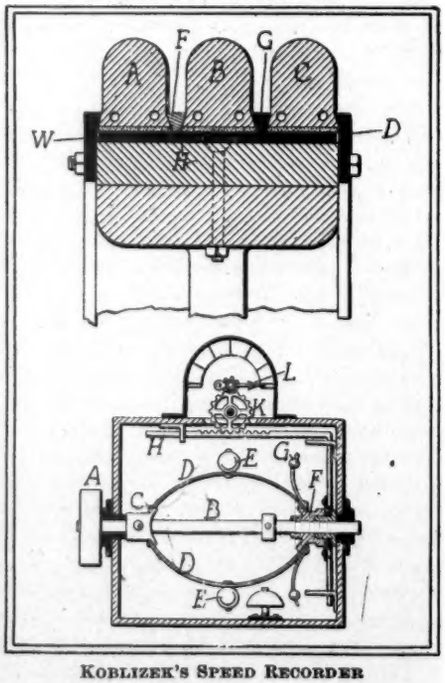
Air Cooling—No. 810,643, dated January 23; to Simeon Ham, Indianapolis, Ind.—The inventor cools his motor by circular flanges surrounding the cylinder walls. These flanges are enclosed in a metal jacket open at the bottom and top. Into this jacket is directed an air current applied by a rotary blower on the end of the crankshaft. The jacket has an outwardly flaring bottom lip and also an inwardly and downwardly curved deflecting lip on top so that the outgoing air is directed against the head of the cylinder. Air enters the bottom of the jacket from the blower and rises through the jacket.

WARRINGTON'S STEERING GEAR



KERR'S DIVIDED WIND SHIELD

SOBER'S THREE-PART TIRE



KOBLIZEK'S SPEED RECORDER

LEGAL LIGHTS AND SIDE LIGHTS

WORSE THAN SIMS' BILL

Washington automobilists are threatened with the most drastic legislation pertaining to automobiles ever enacted by any state or municipal government in this country. In turning down the Sims bill the district commissioners have framed a measure that has the former beaten forty ways of a Sunday as regards severe penalties for violations, and they have sent it to congress with the strongest kind of a recommendation that it be enacted. In effect the proposed law provides that ordinary violations of the regulations other than excessive speeding shall be punishable by a fine of from $1 to $40. For a first offense of speeding a fine of from $5 to $50 is provided; for a second offense from $20 to $100, and for the third offense from $50 to $250 and imprisonment for from 10 days to 1 year, either or both. It is to be noted, however, that this proposed law also covers the reckless or fast driving of horses. In submitting an adverse report on Representative Sims' bill, the district commissioners pointed out to the two congressional committees that deal with local legislation that they early recognized the necessity of regulating the use of automobiles in this jurisdiction and adopted a series of regulations, the validity of which was sustained by the courts.

"As experience developed their inadequacy to meet every exigency," the report says, "the regulations were amended until now they are believed to afford ample safeguards to the public if they are implicitly obeyed and all violations rigorously punished. The Sims bill, in fact, does not materially add to the existing regulations while it does omit many features which experience has shown to be essential. These regulations, it is true, already have the force and effect of law, but the commissioners believe it would be wise to give them congressional sanction. The most serious objection to the automobile is the speed at which it is frequently driven on public thoroughfares. The abatement of this evil is entrusted to a detail of bicycle policemen. The activity of this force is shown by the fact that during the calendar year 1905 there were between 400 and 500 arrests for infractions of the automobile regulations, of which 246 were prosecutions based on violations of the speed limit. An analysis of these latter cases shows that fifteen persons were twice, four persons three times and two persons four times arrested and convicted of violations of the speed regulations. The amount of fines collected during the year from these 246 violators was $2,268. Although the commissioners believe a vigorous enforcement of the penalty provided by the regulations would go far toward restraining the fast running of automobiles, it is realized that occasions might arise wherein the imposition of a fine for overspeeding would be totally inadequate as a punishment. Several of the states already recognize this fact and provide imprisonment as an alternative punishment. We believe an imprisonment law ought to be enacted for the District of Columbia, but suggest that the mandatory language of the proposed measure might well be amended so as to conform to the statutes of the United States. With the prospect of imprisonment continually menacing violators of these speed regulations, it is believed the tendency to overspeeding will be quickly and efficiently checked. The provisions of our bill include horse-drawn vehicles. These are included not only for the purpose of avoiding any charge of discrimination against owners and operators of automobiles, which charge might be made a basis of legal effort to overthrow wise and necessary legislation, but is also based on facts shown by the police records. We also request that we be given authority to revoke the license of any automobile owner or operator who has been convicted for the second time of violating the speed regulations."

There is promise of a big fight in congress before the new legislation gets on the statute books.

HOOSIERS REAL MAD

At a meeting of farmers at Lafayette, Ind., recently, it was resolved that automobiles are a curse and should be abolished, and that if this cannot be done that they be limited to a maximum speed of 10 miles an hour; that the number be placed above the head of the machine, so far as to be readily discernible at any rate of speed, and that the owner of the machine be liable for all damage to life and limb or property caused by automobiles by those legitimately traveling on the public roads; and that owners of automobiles give bonds for the observance of the above rules before being allowed to operate his machine or have any privilege of the public roads. The resolution will be forwarded to Governor Hanly with the request that he incorporate it in his message to the general assembly next January.

VIRGINIA LEGISLATION

Onancock, Va.—Editor MOTOR AGE—A daily paper of Richmond, Va., was recently asked this question: "Has the legislature of Virginia a legal right to enact a law to prohibit travel in automobiles on the public roads of Northampton county, Va., under a heavy penalty? Would such a law be constitutional?" The paper's reply was as follows: "Section 64 of the constitution requires that the general assembly shall enact general laws in all cases which in its judgment may be provided for by general laws. The whole policy of the constitution is against special legislation in any case where a remedy can be afforded by a general law, and the experience of the state has shown that such legislation is often not only unwise, but positively vicious. There can be no doubt that the legislature can pass a law for the reasonable regulation of travel by automobiles on the public roads of the state, but it should be a general law. There is a grave doubt whether the legislature would have the power to prohibit entirely travel by automobiles or by any convenient other mode of conveyance, either in the whole state, or in any sub-division thereof." I will thank MOTOR AGE for its opinion of the matter.—CLAUDE B. NOTTINGHAM.

Class legislation has seldom been tolerated in this country, for it is clearly unconstitutional and hundreds of laws have been wiped off the books simply because they were class measures. MOTOR AGE has always contended that the highways were made not alone for horses, for oxen, for bicycles or for automobiles, but for the use of man. The bicycle was at one time regarded in much the same light as is the automobile and it had to fight its way through a sea of measures introduced by people who were not at all progressive. Modern things are always antagonized. The canal boat, the railroad and the trolley had their day—they are indispensable now. The automobile will be indispensable in a year or so. Pioneers always have to do the fighting. There need be no worry about the automobile; its destiny will work its own way out—but the automobilists must take hold and help it along by fighting for their rights in the courts, carrying the cases as far as possible to get a final ruling.

BRIEF BUSINESS ANNOUNCEMENTS

New York—Harry A. Van Tine is now connected with the Sidney B. Bowman Automobile Co.

New York—Frank A. Sanford has opened a New York agency for the Austin, with offices at 1843 Broadway.

Boston—The Brockton Auto Exchange has been incorporated with a capital stock of $5,000, to deal in automobiles.

New York—C. W. Spencer, who has been selling Pope motor cars ever since they were made, has been appointed assistant manager of the Pope branch here.

Detroit—The Detroit Auto Specialty Co. is now located in its new plant at 908 Greenwood avenue. It manufactures automobile hoods, radiators, hollow metal dashes, tanks, etc.

Akron, O.—H. A. Williams, of 169 Cedar avenue, Cleveland, announces he has organized a company of local capitalists and will build a plant here for the manufacture of automobiles.

Chicago—R. L. Kingston, the United States representative of the Hamburg Tire Co., has closed with the Motor Car Co., at 1427 Michigan avenue, for the Chicago agency for the Hamburg tire.

New York—Harry S. Houpt has taken the agency for the Rauch and Lane electric carriages. Mr. Houpt has decided to use the entire basement of his new garage for the storage and care of electric vehicles.

Chicago—Fred P. Brand, manager of the Chicago branch of the Apperson since the retirement of Jack Fry, has resigned his position, to take effect March 1, to become a traveling representative of the Autocar Co., of Ardmore, Pa.

New York—H. E. Wagner, formerly with the Pope Motor Car Co., has been appointed sales manager by the Decauville Automobile Co. for the Babcock electric carriage, for which the company holds the New York agency.

Albany, N. Y.—The Troy and Albany Automobile Exchange has opened a new garage at the corner of State and Lark streets. While the garage is already opened to the public and business begun, the house will not be ready for a formal opening until March 1.

Pittsburg—The Pittsburg Motor Vehicle Co. moved into its new home last week. The new plant is at Ellsworth avenue and Summerlea street. The structure is of frame and has a capacity of about two cars weekly. The company is capitalized at $200,000, and manufactures light delivery wagons. The company recently absorbed the old Shadyside company. The officers are: President, R. B. Ward; treasurer and general manager, Thomas L. Pfarr; secretary, Charles A. Ward. The sales have all been turned over to James McNaughton, who conducts a sales agency in Buffalo.

New York—Wallie Owen has been added by Manager Caswell to the selling force of the Viqueot.

Providence, R. I.—The Linscott Motor Co. has placed the Rhode Island agency for the National with M. Baldwin, of this city.

Providence, R. I.—Dutee W. Flint, local agent for the Ford, has opened a repair shop in connection with his new garage on Aborn street.

New York—George A. Banker has joined the sales department of the Peerless Motor Car Co., and will assist Charles G. Wridgway in looking after Peerless cars.

Pontiac, Mich.—The Rapid Motor Vehible Co. is preparing to remove to its new factory adjoining the D. G. H. & M. railway tracks, and within the next month will have sufficient machinery installed to treble the present output of commercial cars.

New York—The Covell & Crosby Motor Co. is now installed at 1621 Broadway, where the Ariel is shown.

Milwaukee—William H. Schuchardt is preparing plans for a garage for Nelson P. Hulse, to be built on Knapp street.

Detroit—The Aerocar will be handled locally by the Maxwell-Briscoe-McLeod Co., at 243-45 Jefferson avenue, in connection with the Maxwell.

New York—Announcement is made of the formal opening of the Central Park Automobile Storage Co., at One Hundred and Tenth street and Central Park west.

New York—The Peerless Motor Car Co. has erected an addition to its building at 220-224 West Forty-first street. The company will make a specialty of repair work and will also build automobile bodies.

Hartford, Conn.—President E. V. Hartford, of the Hartford Suspension Co., has selected Andrew C. D[illegible] act as sales manager of Gob[illegible]rs, for which the company has the exclusive American rights.

Hartford, Conn.—The Miner Garage Co. has taken the local agency for the Winton. The company holds the agencies for the Pierce-Arrow, Knox, Pope-Waverley and Winton. Its garage is situated at 120-124 Allyn street.

Minneapolis—Oscar M. Bergstrom, formerly with the Moulton-Jordan Motor Car Co., will engage in the automobile business on his own account. The concern will be known as the Aerocar Co. of Minneapolis, and in addition to being the local representative of the Aerocar, he will carry a full line of accessories. The location of the garage is to be announced later.

Buffalo, N. Y.—The Buffalo Crucible Casting Co. has just been organized with $150,000 capital stock to manufacture crucible steel castings for use in machinery, automobiles, etc. The company intends shortly to build a plant in Buffalo and will employ about 100 men at the start. The Buffalo directors are: W. A. Torne, E. G. Ruppel, of the Buffalo Foundry Co., and J. S. Osgood, of the Erie County Bank building.

Detroit—A new establishment is to be opened here shortly for the manufacture of castings for automobiles, etc. The Brooks brothers, formerly of Buffalo, N. Y., will shortly locate here, and will make a specialty of manufacturing aluminum castings and all sorts of foundry work in brass and bronze. The name of the new concern will be the Hofeller-Brooks Aluminum & Brass Foundry Co. and the factory will be situated at 74-78 Fort street.

NEW INCORPORATIONS

Chicago—Excelsior Automobile Supply Co.; capital stock, $10,000; to manufacture automobile supplies.

Boston—E. L. M. Auto Co.; capital stock, $15,000; to deal in automobiles. Incorporators, H. H. Medcraft, H. L. Elkins and Daniel L. Leary.

Alexandria, Va.—Automobile & Wagon Co.; capital stock, $30,000.

Des Moines, Ia.—Motor Component Mfg. Co.; capital stock, $30,000; to make and sell automobile supplies.

New Rochelle, N. Y.—Wallace Brothers Co.; capital stock, $25,000; to manufacture carriages, automobiles, etc. Incorporators, James A. Wallace, W. R. Wallace and Charles E. Malby.

New York—W. J. Deane & Co.; capital stock, $5,000; to manufacture motors, engines, etc.

New York—New York Motor Truck Co.; capital stock, $85,000; to manufacture motors, engines, etc. Incorporators, John I. Traphagen, William Conover and Edward H. Fallows.

Rochester, N. Y.—Brownell-Trobert Co.; capital stock, $50,000; to manufacture and deal in automobiles.

Harrisburg, Pa.—York Motor Co.; capital stock, $100,000; to manufacture, buy and deal in automobiles and supplies.

Brockton, Mass.—Brockton Auto Co.; capital stock, $5,000. Incorporators, F. E. Smalley and M. H. Bates.

New York—George J. Scott Motor Co.; capital stock, $25,000.

Springfield, Ill.—Hyde Park Garage; capital stock, $25,000; to run a general garage business.

St. Louis—Union Automobile Co.; increase of capital stock from $15,000 to $35,000, all increase paid; assets, $35,000; liabilities, $2,568.61.

New York—Motor Top Co.; capital stock, $5,000; to engage in the manufacture of vehicles; carriages, automobiles, etc.

Boston—Comfort Auto Sight Seeing Co.; capital, $46,000.

Boston—Bay State Auto Co.; capital stock, $10,000.